

PRODUCTION.

LAND SETTLEMENT, ETC.

The total area of the State is 56,245,760 acres. This comprises—

	Acres.
Lands alienated in fee simple	26,204,928
Lands in process of alienation	7,252,749
Crown lands	22,788,033
Total	<hr/> 56,245,760 <hr/>

The Crown lands comprise—

Permanent forests (under Forests Act) ..	3,682,972
Timber reserves (under Forests Act) ..	735,412
State forests and Timber reserves (under Land Act)	329,385
Water reserves	314,111
Reserves for Agricultural Colleges, &c. ..	87,042
Reserves in the Mallee	410,000
Other reserves	356,731
Roads	1,794,218
Water frontages, beds of rivers, lakes, &c.; { unsold land in cities, towns, and boroughs}	3,428,567
Land in occupation under—	
Perpetual leases	91,018
Other leases and licences	53,524
Temporary grazing licences	7,349,405
Unoccupied	4,155,698
Total	<hr/> 22,788,083 <hr/>

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee simple during the last four years.

A portion of the area conditionally sold reverts to the Crown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

ALIENATION OF CROWN LANDS, 1926 TO 1929.

Year.	Area of Crown Lands Sold.			Crown Lands alienated in Fee Simple.	
	Absolutely, at Auction, &c.	Conditionally to Selectors.		Area.	Purchase Money.
		Mallee.	Other.		
	Acres.	Acres.	Acres.	Acres.	£
1926 ..	2,832	388,559	93,469	125,765	87,740
1927 ..	3,824	214,609	85,409	214,173	203,414
1928 ..	5,807	344,571	68,686	213,519	188,339
1929 ..	4,825	310,174	65,294	187,752	114,965

From the period of the first settlement of the State to the end of 1929 the amount realized by the sale of Crown lands was £35,230,180, which represents an average of £1 1s. 1d. per acre for all lands alienated or in process of alienation. Payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Lands
remaining for
disposal.

The next table shows the whole of the unalienated lands of the Crown remaining for disposal:—

CROWN LANDS REMAINING FOR DISPOSAL ON 31st DECEMBER, 1929.

Location.	Classification.						Total.
	Agricultural and Grazing.					Auri-ferous.	
	First.	Second.	Third.	Fourth.	Un-classed.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bulu Bulu ..	11,497	44,176	96,535	160	..	..	152,368
Croajingolong ..	2,510	1,756	551,436	..	834,576	13,850	1,404,128
Dargo ..	..	..	97,993	..	431,100	71,400	600,493
Tambo ..	..	..	203,189	900	364,450	..	568,539
Tanjil ..	..	..	106,854	..	360,650	67,000	534,504
Wonnangatta ..	..	39	146,333	..	941,563	..	1,087,935
Bogong ..	714	11,409	194,880	1,209	158,724	84,518	451,514
Benambra ..	..	403	272,784	1,960	313,684	87,810	676,641
Delatite ..	100	17,453	180,644	11,990	295,750	60,226	566,163
Moirs ..	546	149	3,479	1,029	..	..	5,203
Anglesey ..	..	2,364	59,995	..	..	2,540	64,899
Bourke ..	..	162	..	..	..	..	162
Dalhousie ..	..	168	905	..	..	1,055	2,128
Evelyn ..	19	12,859	..	..	..	1,656	14,534
Mornington ..	..	1,469	11,560	..	..	..	13,029
Bendigo ..	171	787	3,312	..	..	4,095	8,315
Rodney ..	..	88	..	..	..	2,234	2,322
Borong ..	..	502	60,164	..	..	4,011	64,677
Gladstone ..	785	1,736	2,655	..	..	10,541	15,717
Lowan ..	..	654	155,586	36,662	9,614	..	202,516
Kara Kara ..	86	166	2,344	..	..	3,553	6,149
Talbot ..	221	751	461	..	..	40,110	41,543
Tatchera ..	20	70	..	..	..	..	90
Heytesbury ..	..	830	154,257	..	..	..	155,087
Polwarth ..	16,252	16,236	29,677	142	..	..	62,307
Grant ..	..	175	26,105	8,564	..	..	34,844
Grenville ..	..	467	..	..	..	7,550	8,017
Ripon ..	..	380	23,486	..	..	3,406	27,272
Normanby ..	..	..	123,406	..	..	..	123,406
Dundas ..	..	..	70,001	4,799	15,754	..	90,554
Villiers ..	..	..	2,058	..	..	..	2,058
Follett ..	..	1,871	140,292	346	29,136	..	171,645
Karkaroc ..	..	39	..	..	..	..	39
Total ..	32,921	117,109	2,720,391	67,821	3,755,001	465,555	7,158,798
Throughout the State	Swamp or reclaimed lands						1,045
" " ..	Lands which may be sold by auction						6,867
The north-western portion of the State	{ Mallee lands available for selection						5,080
	{ " " (such as are suitable to be eventually classified for selection)						4,333,313
Total area remaining for disposal							11,505,103

Much of the land included in the above statement is temporarily leased under grazing licences.

Persons who may select land. Any person of the age of 18 years or upwards is eligible to apply to select under the Land Acts a prescribed area varying according to the classification of the land—less the area of previous selections.

Concessions to land seekers. The Lands Inquiry Branch gives information to intending applicants and issues concession warrants for half fares on Victorian Railways to persons travelling to make inspection or take possession of land.

Area that may be selected. An applicant may select in the Mallee, under Selection Purchase Lease, 640 acres of first class, 1,000 acres of second class, 1,280 acres of third class, 1,600 acres of fourth class land, or 4,000 acres of land classed 4A; and, in addition, may acquire privately an area equivalent to that which he selects from the Crown.

Grazing licences. Grazing licences are renewable annually, and are only granted for waste lands of the Crown until required under the principal sections of the Act. Particulars of such licences at 31st December, 1929, were as follows:—

Number of Licences	..	..	..	5,422
Area (acres)	..	..	..	7,349,405
Annual Rental	..	..	..	£28,368

Transfer of Land Act. The "Torrens System," whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system has been the means of simplifying procedure in connexion with the transferring of land. It gives a title to the transferee free of any latent defect and reduces the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the Transfer of Land Act, and the Crown grant issues through the Titles Office; but, to bring under the Act land that was parted with prior to that year (5,142,321 acres), application must be made accompanied by strict proofs of the applicant's interest in the property. During 1929 there were submitted 334 applications to have

brought under the Act land amounting to 25,914 acres in extent, and to £1,008,188 in value; while the land actually brought under the Act during the year by application was 13,133 acres valued at £1,001,564. Up to the end of 1929 there had been brought under the Act 3,181,634 acres valued at £68,910,620. The area of the land still under the Old Law System at the end of 1929 was 1,960,687 acres.

Assurance Fund. When application is made to have land brought under the Transfer of Land Act, a contribution to the assurance fund of $\frac{1}{4}$ d. in the £1 on the value of the land is levied on the applicant to assure and indemnify the Government in granting a clear title against all the world, as some other person may have a latent interest in the property, and it may be necessary for the Government to recompense such person out of the fund for the loss of his interest. Receipts during 1929-30 comprised contributions £4,339, interest on stock £4,992, interest on £75,073—advanced under *The Protection of Public Buildings Act 1885*—£3,003 and repayment of advance to Closer Settlement Fire Insurance Fund, £15,000. During the year £74 was paid out of the fund in settlement of claims, £5,095 as interest on securities under the *Special Funds Act 1920*, No. 3067, and £50,000 to Consolidated Revenue. The balance at the credit of the Assurance Fund on 30th June, 1930, was £154,197. The amount paid up to 30th June, 1930, as compensation and for judgments recovered, including costs, was £8,738.

CLOSER SETTLEMENT.

Details relating to the operations of the Closer Settlement Board and to the conditions under which settlers may acquire blocks and advances will be found on pages 507 to 510 of the 1928-29 issue of this work.

Estates purchased. A complete statement of all estates acquired by the Closer Settlement Board at 30th June, 1930, including those purchased by the State Rivers and Water Supply Commission (i.e., estates in irrigable areas), will be found in the report of the Closer Settlement Board for the year ended 30th June, 1930.

A summary of the lands acquired, exclusive of estates purchased for discharged soldiers' settlement (*vide* page 351), is given in the following statement :—

CLOSER SETTLEMENT LANDS ACQUIRED AT 30TH JUNE, 1930.

	Area.	Purchase Money, including Discount on Stock or Debentures.	Total Cost to Date.	Number of Lessees.			Area Unallotted.
				Farm Allotments.†	Workmen's Homes.	Agricultural Labourers' Allotments.	
Dry Areas.	acres.	£	£	Number.	Number.	Number.	acres.
Lands purchased (Farms) ..	870,634	6,046,726	6,354,006	3,487	4	137	17,892
Crown lands taken over (Farms) ..	66,480	29,452	40,542	53	..	17	40,722
Repurchased lands (Workmen's Homes)	628	63,133	94,844	..	967	..	12
Crown lands taken over (Workmen's Homes) ..	360	7,003	9,180	..	107	..	7
Total Dry Areas ..	938,102	6,146,314	6,498,572	3,540	1,078	154	58,633
Irrigable Areas.							
Repurchased lands (Farms) ..	172,143	2,248,960	2,419,406	2,525	..	152	10,466
Crown lands taken over (Farms) ..	922	4,398	4,543	21	..	..	17
Total Irrigable areas	173,065	2,253,358	2,423,949	2,546	..	152	10,483
Total acquired at 30th June, 1930	1,111,167	8,399,672	8,922,521*	6,086	1,078	306	69,116
Less area disposed of under Discharged Soldiers Settlement Acts	73,191	745,381	745,381	..	..	..	..
Total (net) ..	1,037,976	7,654,291	8,177,140	6,086	1,078	306	69,116

* Includes purchase money, £8,399,672; expenses prior to disposal, £85,926; public works, £393,307; and interest capitalized, £43,616.

† Not including 676 lessees of farm allotments disposed of under the Discharged Soldiers' Settlement Acts.

Up to 30th June, 1930, the Board and Commission had acquired 314 properties, with a total area of 1,111,167 acres, (including 67,762 acres of Crown lands), of which 69,116 acres were then unallotted. Portions of estates amounting in the aggregate to 53,879 acres have been sold by public competition, and for public reserves without any restrictions, and are not under conditional purchase leases.

The Land Settlement Agreement of 1922 resulted in 238 approved migrants from overseas being settled. Under the agreement of 1925

between the Imperial and Commonwealth Governments (by which loan moneys are advanced at a very low rate of interest), Victoria, at 30th June, 1930, had received £857,201 for approved settlement schemes at Childers, Katandra, and Maffra-Sale.

The extent of the settlement effected by the Board up to 30th June, 1930, is given in the next statement:—

SUMMARY OF CLOSER SETTLEMENT TO 30TH JUNE, 1930.

Classification of Holdings.	Number.	Average Capital Value.	Average Area.	Total Area.
Dry Areas.	No.	£	Acres.	Acres.
Areas settled—				
Farms	3,495	1,592	230	802,464
Agricultural Labourers' Allotments ..	154	131	16	2,593
Workmen's Homes	1,080	89	3	796
Allotments disposed of under Discharged Soldiers Settlement Acts	181	1,376	195	35,312
Public Competition, Auction, &c. ..	..	..	..	48,041
Total area of land settled .. .. .	..	..	..	889,206
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments .. .. .	..	..	..	42,460
Workmen's Homes .. .. .	..	..	..	8
Public Competition, Auction, &c. .. .. .	..	..	..	713
Area of land acquired but not yet available .. .. .	..	..	..	4,411
Loss of area on subdivision (roads, channels, reserves, &c.) .. .. .	..	..	..	1,304
Total dry areas acquired .. .. .	..	..	..	938,102
Irrigation Areas.	No.	£	Acres.	Acres.
Areas settled—				
Farms	2,243	884	57	129,512
Agricultural Labourers' Allotments ..	152	116	6	916
Allotments disposed of under Discharged Soldiers Settlement Acts	495	915	64	31,547
Public Competition, Auction, &c. ..	..	..	..	5,838
Total area of land settled .. .. .	..	..	..	167,813
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments .. .. .	..	..	..	1,158
Public Competition, Auction, &c. .. .. .	..	..	..	475
Area of land acquired but not yet available .. .. .	..	..	..	1,920
Loss of area on subdivision (roads, channels, reserves, &c.) .. .. .	..	..	..	1,699
Total irrigation areas acquired .. .. .	..	..	..	173,065
TOTAL AREAS acquired to 30th June, 1930 .. .. .	..	..	..	1,111,167

Financial
statement of
Closer
Settlement.

The liabilities and assets of Closer Settlement at 30th June, 1930, are shown hereunder:—

FINANCIAL STATEMENT OF CLOSER SETTLEMENT AT 30TH JUNE, 1930.

Liabilities—						£
For Loans, Advances, and Interest (accrued) .. .. .	..	..	..	..	..	10,092,316
Crown Lands taken over .. .. .	..	..	..	..	..	21,067
Discharged Soldiers' Settlement for land taken over .. .. .	..	..	..	..	..	1,404,471
Sundry Creditors .. .. .	..	..	..	..	..	56,896
Reserves, &c. .. .. .	..	..	..	..	..	260,843
						<u>11,835,593</u>
Assets—						
Balance of purchase money not accrued due by lessees and others						5,689,734
Land on hand .. .. .	..	..	..	..	..	129,624
„ „ sold under conditional purchase leases and subsequently vacated .. .. .	..	..	..	..	..	206,217
Balance of advances on improvements not accrued due .. .. .	..	..	..	..	..	2,553,741
Government Securities .. .. .	..	..	..	..	..	100,000
Balance at credit of Closer Settlement Fund .. .. .	..	..	..	..	..	213,139
State Loans Repayment Fund (balance) .. .. .	..	..	..	..	..	204,846
Sundry assets (including Interest accrued but not yet payable) .. .. .	..	..	..	..	..	928,308
Arrears on land and advances (less amounts written off)—						
Principal—						£
Land .. .. .	..	..	..	..	..	282,384
Advances .. .. .	..	..	..	..	..	515,488
Interest—						
Land .. .. .	..	..	..	..	..	711,985
Advances .. .. .	..	..	..	..	..	300,127
						<u>1,809,984</u>
						<u>11,835,593</u>

At 30th June, 1930, payments by settlers on land and advances amounted to £6,920,320, of which amount £3,488,197 was paid on account of principal and £3,432,123 on account of interest.

Eighty per cent. of the value of the improvements can be accepted as security for arrears.

Arrears secured by improvements	£1,089,255
Arrears secured by principal repaid on land	88,882
Arrears secured by stock mortgage, lien on crop, or unsecured	529,079
Deficiency on vacated allotments	102,768

Total £1,809,984

The sum of £7,982,689 had been paid to the Closer Settlement Fund up to 30th June, 1930. Of that amount £4,436,917 had been transferred to revenue to meet interest due to stockholders, £125,000 had been transferred to a redemption fund to replace amounts written off estates re-valued, £103,373 had been invested in securities with the

State Treasury, £1,212,165 had been utilized for redemption and cancellation of stock, and £1,891,936 for capital and working expenditure, the balance at the credit of the fund on 30th June, 1930, being £213,298. The balance of unredeemed securities is now £9,468,096, on which the interest payable amounts to £421,725 per annum.

Up to 30th June, 1930, 15,764 persons had received advances aggregating £4,483,982 to effect improvements, or upon improvements already effected, and 6,309 persons had received advances amounting to £268,731 for the purchase of wire netting.

Discharged Soldiers' Settlement. The first Discharged Soldiers Settlement Act was passed in 1917. In this and subsequent Acts, now consolidated under the *Closer Settlement Act* 1928, No. 3656, provision was made for the settlement of discharged soldiers on the land and for other matters. The operation of these acts is under the control of the Closer Settlement Board, with the limitation that the closer settlement areas under irrigation conditions, and situated within an Irrigation and Water Supply District within the meaning of the *Water Act* 1928, are managed by the State Rivers and Water Supply Commission.

Up to 30th June, 1930, the Closer Settlement Board and the State Rivers and Water Supply Commission had acquired for the settlement of discharged soldiers 2,514,229 acres at a cost of £14,647,039, including 73,191 acres of Closer Settlement land taken over and disposed of under the Discharged Soldiers Settlement Acts. Of these lands 224,080 acres were transferred to civilians under Closer Settlement Acts.

The following is a summary of the lands acquired :—

**LANDS ACQUIRED FOR DISCHARGED SOLDIERS'
SETTLEMENT TO 30TH JUNE, 1930.**

				Area.	Cost.
				acres.	£
Land purchased (3,510 properties)	..	..	..	1,763,090	13,360,408
Crown Lands taken over	..	..	..	677,948	541,250
Closer Settlement Lands taken over	..	..	..	73,191	745,381
Total area and cost of purchase	..	..	..	2,514,229	14,647,039
Expenses prior to disposal	..	..	..	..	114,011
Public Works effected	..	..	..	..	918,361
Interest capitalized	..	..	..	..	143,070
Total cost to 30th June, 1930	..	..	..	..	15,822,481
Less land transferred to civilians under Closer Settlement Acts	..	..	..	224,080	2,289,205
Total net area and cost	..	..	..	2,290,149	13,533,276

Extent of
Soldier
Settlement.

The extent of settlement at 30th June, 1930, is given in the table which follows:—

SUMMARY OF DISCHARGED SOLDIERS' SETTLEMENT TO 30TH JUNE, 1930.

	Dry Areas.	Irrigation Areas.
	acres.	acres.
Area of land settled—Soldiers	1,888,654	52,304
Area of land settled—Civilians (Closer Settlement Acts)	204,563	19,517
Area of land available	213	1,727
Area of land acquired but not yet available		19,483
Sales by Auction, &c.	302,203	25,565
Total land acquired to 30th June, 1930	2,395,633	118,596
Farms, Number of—		
Soldier Settlers	5,865	1,298
Civilians	886	397
Total	6,751	1,695
Average area—acres	310	42
Average capital value	£1,630	£753

The number of soldiers settled up to that date was as follows:—

On land purchased by the Closer Settlement Board ..	6,966
On land purchased by the State Rivers and Water Supply Commission	2,116
On Crown Lands—Ordinary and Mallee Areas	1,299
On Crown Lands—Merbein and Nyah Irrigation Areas ..	161
Soldiers receiving assistance from the Closer Settlement Board, on share farming, leasing agreements and freehold land	770
Total	11,312

There were 85 blocks available under ordinary Closer Settlement conditions, for which returned soldiers get preference.

Financial
statement
of Discharged
Soldiers'
Settlement.

The liabilities and assets of Discharged Soldiers' Settlement are shown hereunder :—

FINANCIAL STATEMENT OF DISCHARGED SOLDIERS' SETTLEMENT AT 30TH JUNE, 1930.

Liabilities—					£
For Loans, Advances, and Interest	..	..	..	..	24,791,734
Crown Lands taken over	..	..	..	..	542,302
Closer Settlement for land taken over	..	..	..	..	239,550
Sundry other liabilities, including reserve for improvements					263,733
					<hr/> 25,837,319 <hr/>
Assets—					
Balance of purchase money not accrued due by lessees and others					12,433,530
Land on hand	..	..	..	..	104,696
„ „ (sold under Conditional Purchase Leases and subsequently vacated)	..	..	..	..	513,408
Balance of advances on improvements not accrued due	..				3,642,866
Balance of lessees' consolidated debt accounts	..				1,453,041
State Loans Repayment Fund	..	..	..	..	241,946
Concession of Interest and Administration expenses (State and Commonwealth)	..	..	..	..	3,630,532
Sundry assets (including Interest accrued but not yet payable)					293,028
Arrears on land and advances (less bad debts written off and interest concessions allowed)—					
Principal—					£
Land	..	..	..	..	234,374
Advances and consolidated debts	..				912,008
Interest—					
Land	..	..	..	..	1,420,600
Advances and consolidated debts	..				584,781
					<hr/> 3,151,763 <hr/>
Suspense Accounts	..	..	..	..	372,509
					<hr/> 25,837,319 <hr/>

At 30th June, 1930, payments by soldier settlers on land and advances amounted to £7,284,967, of which amount £4,409,082 was paid on account of principal and £2,875,885 on account of interest. The amount of assistance rendered by the Board by way of advances was £9,485,796 to 11,312 soldier settlers.

Concessions granted by the State Government (£3,787,147) and the Commonwealth Government (£4,063,425)—representing interest, administration charges, and losses—have relieved the settlers to the extent of £7,850,572.

The condition of Soldier Land Settlement in Australia has been the subject of an inquiry by His Honour Mr. Justice Pike. He estimated at 30th June, 1927, that the total loss sustained by Victoria was £7,721,891, to which must be added, when ascertained, further losses due to providing home maintenance areas and to the further writing down of indebtedness.

Five Boards have been appointed by the Government to deal with the question of "Home Maintenance" in the following classes of farming:—

- (a) Wheat and sheep in the Mallee.
- (b) Wheat and sheep, other than the Mallee.
- (c) Grazing.
- (d) Orchards.
- (e) Dairying (Eastern Victoria).

As far as practicable, blocks which became vacant in recent years were subdivided and allotted to adjoining settlers to increase their areas.

Further particulars will be found in the Report of the Closer Settlement Board for the year ended 30th June, 1930.

WATERWORKS.

All Victorian waterworks are controlled by official bodies, either State or local. In the following table is given a statement of State expenditure on works under the control of the State Rivers and Water Supply Commission, as well as grants and loans to local bodies. In addition to their receiving free grants, large sums have been written off the liabilities of local bodies. The information appearing below has been largely taken from the Annual Report of the State Rivers and Water Supply Commission.

**State
Expenditure
on
Waterworks.**

STATE EXPENDITURE ON WATERWORKS TO 30TH JUNE, 1930.

	Total Advances, including Cost of Loan Flotation.	Redem- tion Paid.	Capital Written Off.	Free Head- works.	Amount standing at Debit, 30th June, 1930.
State Rivers and Water Supply Commission—	£	£	£	£	£
Completed Works—					
Waterworks Districts ..	4,820,924	49,775	175,055	..	4,605,094
Irrigation and Water Supply Districts ..	4,349,628	31,690	575,152	..	3,742,786
Goulburn Channel Works (Free Headworks excluded) ..	1,381,266	106	..	..	1,381,160
Pyke's Creek, Melton and Distributary Works ..	228,849	..	..	..	228,849
Uncompleted or Unallotted Works—					
Mornington Peninsula ..	764,558	..	..	..	74,558
Koo-wee-rup, Cardinia, and other Flood Protection Schemes ..	391,980	..	..	..	391,980
Eildon Reservoir and Waranga Reservoir Enlargement ..	2,364,176	1,000	..	..	2,363,176
Maffra—Sale Irrigation and Water Supply Districts ..	1,174,412	..	..	..	1,174,412
Millewa Waterworks Districts ..	495,595	..	..	..	495,595
Red Cliffs Irrigation and Water Supply District ..	774,693	..	..	..	774,693
Bellarine Peninsula ..	242,392	..	..	..	242,392
Campaspe and Loddon River Storages (proposed) ..	81,191	..	..	..	81,191
Free Headworks ..	1,254,548	420	..	1,254,128	..
River Murray Agreement Works ..	2,135,083	..	..	..	2,135,083
Surveys, &c. ..	284,200	..	..	..	284,200
Total State Rivers and Water Supply Commission ..	20,752,495	82,991	750,207	1,254,128	18,665,169
First Mildura Irrigation Trust and Mildura Urban Trust ..	119,782	8,895	..	..	110,887
Other Waterworks Trusts ..	1,979,524	283,111	316,537	..	1,379,876
Ballarat Water Commissioners ..	396,990	90,948	2,111	..	303,931
Other Local Bodies (Municipalities) ..	418,381	84,561	163,760	..	170,060
Abolished Irrigation and Waterworks Trusts ..	32,754	30	32,724	..	..
Free Grants to Local Authorities ..	147,046	..	..	147,046	..
Melbourne and Metropolitan Board of Works ..	3,189,934	3,189,984*	..	..	..
Geelong Waterworks and Sewerage Trust ..	459,737	300,235	..	..	159,502
Total ..	27,496,643	4,040,705	1,265,339	1,401,174	20,789,425

* Of this amount £800,000 was provided out of Consolidated Revenue, the balance being payments by the Melbourne and Metropolitan Board of Works.

In addition to the capital written off, as shown above, an amount of £579,786 representing arrears of interest was written off by Act No. 1625 of 1899, making the total actually written off the liabilities of the Trusts (Irrigation and Waterworks) and Municipal Corporations, £1,845,125.

The State expenditure on waterworks, as shown in the above table, does not include large sums which have been spent by other controlling bodies out of their own funds. Up to 30th June, 1930, the additional capital expenditure of the bodies mentioned was as follows:—Melbourne and Metropolitan Board of Works, £7,199,831; Geelong Waterworks

and Sewerage Trust, £443,825; and the Ballarat Water Commissioners, £258,172. Smaller amounts have been expended by other municipalities, details of which are not readily available.

IRRIGATION.

Prior to 1905 the management of irrigation in Victoria was in the hands of various Irrigation Trusts, which were financed by the State. These Trusts drifted into financial difficulties and the State was compelled to assume control. In the year mentioned, by the authority of Parliament, the State Rivers and Water Supply Commission was constituted and entrusted with the management of all irrigation works, except those controlled by the First Mildura Trust. This authority is embodied in the *Water Act 1928*—which consolidates the *Water Acts of 1915, 1916, and 1918*, the *Ballarat Water Commissioners Act 1921*, and *Section 5 (2) of the Closer Settlement Act 1922*. The chief difficulties under which the Irrigation Trusts laboured were sparse settlement, and the absence of powers to make compulsory charges on the properties commanded by the irrigation channels. Since the assumption of control by the Commission a policy of closer settlement on the lands served by the irrigation channels has been inaugurated and vigorously pushed on, and a system of compulsory rating enforced along with which there has been the allotment of water as a right to properties in channelled areas.

The particulars in the following statement, while not covering the whole of the activities of the State Rivers and Water Supply Commission, will furnish a general idea of the development of water conservation and distribution in Victoria under its administration; also of the value of an efficient water supply to country lands, whether for domestic and stock purposes only, or for the addition of irrigation to lands already so supplied:—

	At 30th June, 1907.	At 30th June, 1930.
Irrigation Districts—		
Number of Districts administered	10	33
Number of Districts having Water Rights	Nil	25
Total of such Water Rights	Nil	408,000 ac. ft.
Area under Irrigated Culture	108,000 acres	567,000 acres
Valuation for Rating purposes	£196,000	£776,000
Rural Waterworks Districts—		
Number of Districts administered (excluding Coliban)	3	31
Valuation for Rating purposes	£125,000	£1,738,000
Urban Districts—		
Number of Districts administered	1	70
Valuation for Rating purposes	£5,600	£529,000

An illustration of the influence of closer settlement and the allotment of water rights in extending irrigation is contained in the following table, which shows, for the districts having water rights, most of which are directly affected by the Commission's Closer Settlement policy the areas irrigated in 1909-10—the year in which these two factors were first put into operation—and the average areas for the last five years :—

PROGRESS OF IRRIGATION IN CLOSER SETTLEMENT AREAS.

District (having allotted Water Rights).	Area Irrigated.	
	1909-10.	Average for last Five Years.
Supplied from the Goulburn—	Acres.	Acres.
Shepparton .. ..	..	15,724
South Shepparton .. ..	..	4,030
Rodney	32,356	63,884
Stanhope	2,000	12,777
Tongala	3,000	19,495
Rochester	500	43,139
Echuca North .. ..	..	4,650
Dingee .. ..	..	3,920
Tragowel Plains	20,000	47,200
Supplied from the Murray—		
Leitchville .. ..	..	3,712
Cohuna	12,000	18,521
Gannawarra	7,825	18,958
Koondrook	5,029	18,378
Swan Hill	5,410	18,534
Nyah	569	2,735
Red Cliffs (two years) .. ..	..	10,275
Merbein	202	7,465
Third Lake (four years) .. ..	..	3,287
Mystic Park .. ..	..	2,709
Tresco .. ..	..	1,367
Fish Point (three years) .. ..	..	2,091
Supplied from the Werribee—		
Bacchus Marsh	31	2,597
Werribee .. ..	..	7,233
Supplied from the Macallister—		
Maffra (two years) .. ..	..	7,683
Sale (two years) .. ..	..	3,897
Total	88,922	344,261

The area under irrigated culture for all kinds of crops in 1929-30 was 566,577 acres, being an increase of 94,882 acres over the area irrigated in the previous year and 151,594 acres above the average of the previous five years. The area irrigated in 1929-30 constitutes a new record, being no less than 89,077 acres in excess of the area in any previous watering. The area irrigated in that year includes upwards of 18,000 acres watered under yearly permits granting authority to divert water from streams throughout the State.

Total area
irrigated.

The subjoined table shows the total extent of irrigated land in the State in 1909-10 and each of the last five years, and the purposes for which the land was utilized :—

IRRIGATED AREAS : HOW UTILIZED.

Crop.	1909-10.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals	23,715	57,987	40,655	91,538	60,880	93,803
Lucerne	24,124	116,753	119,721	121,540	122,441	135,111
Sorghum and other annual fodders ..	8,094	37,340	29,476	60,104	41,130	59,401
Pastures	50,541	51,345	131,725	118,153	154,459	186,249
Vineyards and orchards	17,524	69,108	69,042	71,043	70,681	70,265
Fallow	4,988	5,102	9,992	6,727	11,120	12,596
Miscellaneous ..	785	6,050	5,921	8,395	10,984	9,152
Total ..	129,771	343,685	406,532	477,500	471,695	566,577

NOTE.—In 1909-10, 8,000 acres, details of which are not available, were irrigated by private diversions, making a total area for that year of 137,771 acres.

Of the total area irrigated in 1929-30—566,577 acres—the percentages devoted to different purposes were as follows :—Pastures, 33 ; cereals, 17 ; lucerne, 24 ; vineyards, orchards, and gardens, 12 ; sorghum and other annual fodder crops, 10 ; fallow, 2 ; and miscellaneous, 2.

Notwithstanding that the Commission did not purchase any additional land for settlement during the year 1929-30, 75 applications from new settlers for irrigation farms were approved on farm allotments which from time to time became available. Sixty-six of the applicants took up farms under ordinary Closer Settlement terms, and six under Discharged Soldiers Settlement Acts, while three were oversea settlers. Additional areas were granted to 78 established settlers, the majority of whom were discharged soldiers.

Applications for transfers from 113 leaseholders were approved.

The following statement shows the land purchased and subdivided by the State, and the extent of settlement on each estate :—

Closer Settlement Estates.	Area of Lands purchased by the State in Acres.	Properties Subdivided.						
		Area in Acres.	Number.	Number of Families thereon when Purchased.	Subdivided into—		Number of Closer Settlement Blocks now occupied.	Present Increase in Number of Families.
					Number of Closer Settlement Blocks.	Average Area in Acres.		
Shepparton	14,170	14,170	33	29	377	35	361	332
East Goulburn	13,400	13,400	21	20	162	74	156	136
Rodney	3,230	3,230	8	5	55	57	46	41
Stanhope	21,500	21,500	7	13	272	68	250	237
Kyabram	4,600	4,600	10	12	68	63	63	51
Tongala	19,090	19,090	41	36	308	60	295	259
Koyuga	4,200	4,200	} Pt. 1	}	54	73	52	52
Cornelia Creek	2,500	2,500			19	161	19	19
Nanneella	9,040	9,040	18	8	124	70	119	111
Echuca	3,600	3,600	8	4	30	105	30	26
Bamawm	13,400	13,400	28	21	192	65	189	168
Dingee	500	500	3	1	20	23	15	14
Calivil	4,800	3,860	8	6	26	149	26	20
Cohuna	12,000	12,000	29	10	142	80	120	110
Koondrook	9,060	9,060	14	10	125	66	103	95
Swan Hill	12,500	12,500	34	16	325	36	322	306
Nyah	3,800	3,800	8	1	235	15	230	229
Merbein (Crown)	8,300	8,300	..	..	417	20	416	416
Red Cliffs	33,000	18,000	1	3	682	17	673	670
Bacchus Marsh	70	70	1	..	2	36	2	2
Werribee	10,000	10,000	1	11	228	36	223	212
Hallam	3,300	1,860	7	4	96	19	85	81
Maffra-Sale	10,570	8,970	23	22	175	48	173	151
Properties acquired under Section 20, <i>Closer Settlement Act</i> 1928, outside above Estates	216,630	197,650	304	282	4,134	43	3,970	3,738
	19,540	..	..	..	..	..	203	..
	236,170							

Closer Settlement in irrigation areas commenced in 1909, and under the *Closer Settlement Act* 1912, administration in these areas was placed under the direct control of the State Rivers and Water Supply Commission. At 30th June, 1930, 236,170 acres had been purchased, and 4,173 families settled, or over 17 times as many as resided thereon prior to their subdivision for Closer Settlement.

Dairying is still the main source of production in the irrigation areas, and these areas are proving most suitable for this industry. In the Standard Herd Test conducted by the Department of Agriculture there were 50 herds whose average yield per cow of butter fat exceeded 400 lb., and of these no less than 21 were from the irrigation areas, though these areas contain only 11 per cent. of the cows in the State.

Tobacco is being profitably grown in the Rochester and Shepparton districts, and it would appear that a great expansion in production in the irrigation areas is possible.

Another large crop of dried fruit was harvested this year, the total tonnage being 47,750 tons, as compared with 48,000 tons in 1929. Red Cliffs headed the list with a yield of 17,000 tons, or more than 2 tons per acre of producing vines. It is pleasing to note that there was again an increase in tonnage of dried fruit exported to Canada. At a conference convened by the Federal Government of the States concerned, committees were appointed to further investigate certain phases of the dried fruit industry with a view to its stabilization and improvement in its financial position.

The production of canned fruits this year was a record, the pack for the whole of the State being 21,200,000 tins of apricots, peaches, and pears. Of this quantity no less than 71 per cent. was put up by the co-operative canneries established in the irrigation areas which represents 50 per cent. of the total Australian pack for the past season. The appointment of a Trade Commissioner in Canada has greatly assisted the disposal of canned fruit in that Dominion, and, as similar appointments are being contemplated for the East, it is anticipated that further avenues of disposal for these and other irrigation products should be successfully opened up in the near future.

Despite damage done by severe frosts in September, 1929, to the citrus orchards in the irrigation areas of the Goulburn and Murray Valleys, large crops are being harvested this year. At Red Cliffs, experiments in re-budding to improve the yield and to obtain standardization of citrus types are being carried out by the Department of Agriculture. Special attention is also being given to producing Valencias that will not revert to the green stage, and if this is successful freshly picked fruits will be available until much later in the summer than at present.

In addition to waterworks for purposes of irrigation, extensive schemes for the supply of water for domestic and stock purposes are under the control of the State Rivers and Water Supply Commission. Altogether, the area within the State so supplied is approximately 24,239 square miles—about 28 per cent. of the total area of the State. The major portion so supplied is in the Mallee and Wimmera districts.

The number of towns supplied with water, exclusive of the City of Melbourne and its suburbs, is as follows:—92 towns of a total population of 118,600 supplied by the Commission, 110 towns with a total population of 193,000 supplied by Waterworks Trusts, and 17 towns with a total population of 77,200 supplied by Local Governing Bodies.

STORAGE AND SUPPLY SCHEMES.

In 1902 the total capacity of storages in the State was 172,000 acre feet. The present capacity is 1,273,920 acre feet, which has been temporarily reduced during repairs to Eildon Reservoir. When the Wimmera Storages and Glenmaggie and Eumemmerring Reservoirs are completed, the total capacity will be

**Total Storages
in State.**

about 1,351,520 acre feet. The Hume Reservoir, in course of construction, will, unless otherwise decided by the Commonwealth and State Governments, contain 2,000,000 acre feet, half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria. The following statement sets out the capacities of the various storages in the State :—

EXISTING STORAGES.						Capacities in Acre Feet.
<i>Goulburn System—</i>						
Goulburn Weir	..	..	..	..	..	20,700
Waranga	..	..	..	..	..	333,400
Eildon (200,000 acre feet during repair)	..	..	..	..	..	306,000
						660,100
<i>Murray-Loddon System—</i>						
Hume Reservoir (part of 2,000,000 acre feet—half share)						50,000
Kow Swamp	..	..	..	..	..	40,860
Laanecoorie	..	..	..	..	..	14,000
Kerang North-west Lakes	..	..	..	..	..	92,000
Lake Boga	..	..	..	..	..	28,000
Long Lake	..	..	..	..	..	3,820
						228,680
<i>Wimmera-Mallee System—</i>						
Lake Lonsdale	..	..	..	..	..	45,480
Wartook	..	..	..	..	..	23,800
Fyans Lake	..	..	..	..	..	17,100
Taylor's Lake	..	..	..	..	..	30,000
Pine Lake (part of 62,000 acre feet)	..	..	..	..	..	52,000
Lower Wimmera Weirs	..	..	..	..	..	2,870
Batyo Catyo (Avon Regulator)	..	..	..	..	..	5,000
Lake Whittou	..	..	..	..	..	1,300
Earthen Storages, Township Reservoirs, and Mallee Tanks						5,610
						183,160
<i>Maffra-Sale System—</i>						
Glenmaggie Reservoir (part of 150,000 acre feet)	..	..	..	..	..	104,500
<i>Coliban System—</i>						
Upper Coliban	..	..	..	..	..	25,700
Malmsbury	..	..	..	..	..	12,300
Subsidiary Reservoirs	..	..	..	..	..	6,930
						44,930
<i>Werribee—</i>						
Pykes Creek	..	..	..	..	..	21,000
Melton	..	..	..	..	..	17,000
						38,000
<i>Bellarine Peninsula System—</i>						
Wurdee Boluc	..	..	..	..	..	10,000
Service Basins	..	..	..	..	..	260
						10,260
<i>Mornington Peninsula System—</i>						
Beaconsfield, Frankston, and Mornington Reservoirs	..	..	..	..	..	1,560
Service Basins	..	..	..	..	..	180
Eumemmetring Reservoir (part of 3,100 acre feet)	..	..	..	..	..	1,000
						2,740
<i>Miscellaneous—</i>						
Wonthaggi	..	..	..	..	..	1,550
Total capacity of existing Storages						1,273,920

ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE
OF CONSTRUCTION.

	Capacities in Acre Feet.
<i>Wimmera-Mallee System—</i>	
Pine Lake (balance of 62,000 acre feet)	10,000
Green Lake	20,000
	<hr/> 30,000
<i>Maffra-Sale System—</i>	
Glenmaggie Reservoir (balance of 150,000 acre feet)	45,500
<i>Mornington Peninsula System—</i>	
Eumemmerring Reservoir (first stage—balance of 3,100 acre feet)	2,100
<i>Murray System—</i>	
Hume Reservoir, at junction with Mitta River, half-share of balance of 2,000,000 acre feet	950,000
	<hr/>
Total capacity of storages when works in hand are com- pleted	2,301,520
	<hr/>

Detailed descriptions of the various systems which have been instituted for irrigation and for supplying water for domestic and stock purposes appear in *Victorian Year-Book* 1928-29 (pp. 526 to 534).

Mildura Irrigation Settlement. The Mildura Irrigation Settlement, on the River Murray, was established in 1887 under the management of the Chaffey Brothers Limited, and in 1895 the control of the water supply was vested in the First Mildura Irrigation Trust. Water is obtained by pumping from the river. The extent of watering done represented 42,230 acres in 1925-26, 42,134 acres in 1926-27, 48,536 acres in 1927-28, 52,726 acres in 1928-29 and 51,780 acres in 1929-30.

The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1930, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION
TRUST, 1929-30.

Receipts.	£	Payments.	£
Horticultural Rates ..	34,454	Wages and Salaries ..	17,765
Special Waterings, &c. ..	3,319	Firewood	14,854
Miscellaneous	3,903	Interest, Sinking Fund and Depreciation	2,670
		Miscellaneous	8,262
	<hr/>		<hr/>
Total	41,676	Total	43,551
	<hr/>		<hr/>

METEOROLOGY.

Particulars in regard to climate and weather conditions have been furnished by the Commonwealth Meteorologist, and are given in the following tables. In the first are shown the rainfall for each of the years 1927, 1928, and 1929, and the average yearly amount of rainfall deduced from all available records to December, 1929, in each of the 26 river basins or districts constituting the State of Victoria:—

RAINFALL.—YEARLY RECORDS AND AVERAGES.

Basin or District.	Rainfall.			
	During the Year—			Yearly Average to December, 1929.
	1927.	1928.	1929.	
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	22.33	29.86	26.89	26.35
Fitzroy, Eumeralla, and Merri Rivers	24.11	28.10	30.80	28.07
Hopkins River and Mt. Emu Creek ..	19.45	28.53	26.25	24.86
Mt. Elephant and Lake Corangamite	19.91	28.17	25.25	25.73
Cape Otway Forest ..	34.36	42.28	45.84	39.34
Moorabool and Barwon Rivers ..	17.05	25.92	23.95	23.86
Werribee and Maribyrnong Rivers ..	16.53	24.77	23.55	23.31
Yarra River and Dandenong Creek ..	25.22	33.71	39.56	33.91
Koo-wee-rup Swamp ..	25.82	34.18	37.80	35.78
South Gippsland ..	31.69	41.66	38.35	38.82
Latrobe and Thomson Rivers ..	30.84	40.68	39.73	38.21
Macallister and Avon Rivers ..	20.37	24.64	20.80	24.27
Mitchell River ..	24.21	29.29	21.11	25.92
Tambo and Nicholson Rivers ..	25.22	27.80	22.76	27.38
Snowy River ..	35.18	35.79	31.95	34.36
Murray River ..	10.43	20.88	14.62	16.74
Mitta Mitta and Kiewa Rivers ..	30.29	33.45	25.56	33.21
Ovens River ..	25.97	37.98	27.75	33.42
Goulburn River ..	18.14	29.62	22.25	26.21
Campaspe River ..	14.77	27.56	18.76	22.74
Loddon River ..	12.94	23.98	15.35	19.98
Avoca River ..	11.28	18.92	11.13	16.88
Avon and Richardson Rivers ..	11.41	16.73	10.63	15.43
Eastern Wimmera ..	15.82	21.71	18.72	21.20
Western Wimmera ..	16.09	20.09	17.97	19.81
Mallee ..	6.85	12.79	8.23	12.45
Weighted Averages ..	18.58	26.04	21.80	24.12

The wettest portion of the State is the Cape Otway Forest, which is closely followed by the South Gippsland district and the Latrobe and Thomson Basin. The lowest rainfall occurs in the Mallee district, where it averages 12.45 inches per annum, as compared with 24.12 inches for the whole State.

An estimate of the areas of the State, in square miles, subject to different degrees of rainfall was first made in 1910. More comprehensive data has since become available, and in 1925 the Commonwealth Meteorologist issued the following revised figures:—

DISTRIBUTION OF AVERAGE RAINFALL.

Rainfall.						Area.
Inches.						Square Miles.
Under 15	..	..	..	..	..	19,270
15 to 20	..	..	..	..	..	13,492
20 to 25	..	..	..	..	..	14,170
25 to 30	..	..	..	..	..	15,579
30 to 40	..	..	..	..	..	14,450
40 to 50	..	..	..	..	..	7,338
50 to 60	..	..	..	..	..	2,980
Over 60	..	..	..	..	..	605

The rainfall recorded for each quarter of 1929 and the quarterly averages up to 1929 deduced from all available records are as follows:—

RAINFALL—QUARTERLY RECORDS AND AVERAGES.

Basin or District.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.	
	Amount.	Average.	Amount.	Average.	Amount.	Average.	Amount.	Average.
	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.
Glenelg and Wannon Rivers	3'31	3'64	9'85	7'91	7'82	8'95	5'91	5'85
Fitzroy, Eumeralla, and Merri Rivers	3'62	4'29	10'09	8'28	9'21	9'33	7'88	6'17
Hopkins River and Mt. Emu Creek	4'43	4'26	8'24	7'09	6'05	7'70	7'53	5'81
Mt. Elephant and Lake Corangamite	4'42	4'63	7'97	7'05	5'78	7'92	7'08	6'13
Cape Otway Forest	6'20	6'02	16'48	11'69	11'88	13'13	11'28	8'50
Moorabool and Barwon Rivers	4'35	4'79	6'78	6'42	5'20	6'74	7'62	5'91
Werribee and Maribyrnong Rivers	3'96	5'19	7'00	5'93	5'12	6'23	7'47	5'96
Yarra River and Dandenong Creek	7'66	7'07	11'99	8'66	8'43	9'14	11'48	9'04
Koo-wee-rup Swamp	6'97	6'87	11'27	9'80	9'23	9'99	10'33	9'12
South Gippsland	9'16	7'93	12'12	10'73	8'54	11'23	8'53	8'93
Latrobe and Thomson Rivers	6'95	7'31	12'63	9'80	9'72	11'03	10'43	10'07
Macallister and Avon Rivers	4'61	6'41	5'40	5'43	3'97	5'90	6'82	6'53
Mitchell River	4'01	6'77	5'34	5'80	4'93	6'70	6'83	6'65
Tambo and Nicholson Rivers	4'06	7'13	5'79	6'44	5'38	6'66	7'53	7'15
Snowy River	5'42	8'11	9'07	8'93	6'90	9'00	10'56	8'32
Murray River	3'00	3'31	5'03	4'88	3'22	4'79	3'37	3'76
Mitta Mitta and Kiewa Rivers	3'58	6'17	7'88	8'90	8'07	10'31	6'03	7'83
Ovens River	3'21	5'58	10'49	9'86	8'58	10'80	5'47	7'18
Goulburn River	3'54	4'76	8'20	7'51	4'74	7'89	5'77	6'05
Campaspe River	2'98	4'11	7'14	6'88	4'02	6'95	4'62	4'80
Loddon River	2'44	3'63	5'39	5'90	3'99	6'11	4'13	4'34
Avoca River	2'38	2'89	3'25	5'11	2'36	5'30	3'14	3'58
Avon and Richardson Rivers	2'83	2'68	3'33	4'57	1'96	4'87	2'51	3'11
Eastern Wimmera	3'08	3'03	5'71	6'43	4'56	7'08	5'37	4'66
Western Wimmera	2'30	2'51	6'26	6'17	5'23	6'89	4'18	4'24
Mallee District	1'66	2'29	2'06	3'58	1'60	3'75	2'91	2'83
The whole State	3'65	4'46	6'99	6'78	5'24	7'27	5'92	5'61

The averages of the climatic elements for the seasons in Melbourne deduced from all available official records are given below :—

AVERAGES OF CLIMATIC ELEMENTS IN MELBOURNE.

Meteorological Elements.	-Spring.	Summer.	Autumn.	Winter.
Mean pressure of air in inches	29·969	29·922	30·079	30·077
Monthly range of pressure of air—Inches	0·892	0·766	0·818	0·975
Mean temperature of air in shade—°Fahr.	57·7	66·6	59·3	50·0
Mean daily range of temperature of air in shade—°Fahr.	18·6	21·1	17·3	13·9
Mean relative humidity. Saturation=100	66	60	69	76
Mean rainfall in inches	7·25	5·93	6·57	5·74
Mean number of days of rain	38	24	34	42
Mean amount of spontaneous evaporation in inches	10·27	17·34	7·90	3·66
Mean daily amount of cloudiness—Scale 0 to 10	6·0	5·2	5·9	6·4
Mean number of days of fog	1	1	6	12

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1929 and for the last 74 years, as well as the extremes between which the yearly average values of such elements have oscillated in the latter period :—

YEARLY AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS.

Meteorological Elements.	Yearly Averages and Extremes.			
	Year 1929.	Average for 74 Years.	Extremes between which the Yearly Average Values have oscillated in 74 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ..	29·993	30·012	30·106	29·945
Highest " " " " ..	30·605	30·606	30·770	30·488
Lowest " " " " ..	29·146	29·249	29·495	28·942
Range (inches)	1·459	1·357	1·719	1·104
Mean temperature of air in shade (°Fahr.)	58·2	58·4	59·9	57·3
Mean daily maximum .. (°Fahr.)	66·6	67·3	69·0	65·4
Mean daily minimum	49·8	49·6	51·2	47·2
Absolute maximum	101·1	105·0	111·2	96·6
Absolute minimum	29·2	30·8	34·2	27·0
Mean daily range	16·8	17·7	20·4	15·0
Absolute annual range	71·9	74·2	82·6	66·0
Solar Radiation (mean maxima) ..	116·6	117·8	127·6	106·0
Terrestrial Radiation (mean minima) .. (°Fahr.)	44·2	43·9	46·8	39·5
Rainfall (in inches)	28·81	25·49	38·04	15·61
Number of wet days	168	138	171	102
Year's amount of free evaporation (in inches)	39·88	39·17	45·66	31·59
Percentage of humidity (saturation =100)	63	68	76	61
Cloudiness (scale 10 = overcast, 0 = clear)	6·0	5·9	6·4	4·8
Number of days of fog	10	20	48	5

AGRICULTURAL RESEARCH AND EDUCATION.

Department of Agriculture.

This Department is controlled by a Minister of the Crown, under whom there is a large staff of experts with the Director of Agriculture as permanent head. These officers are actively engaged in supervising all matters relating to the Agricultural, Pastoral, Fruit and Dairying Industries of the State, and in giving instructions to those engaged therein. The Department publishes a monthly journal.

Melbourne University School of Agriculture.

Melbourne University has a well-equipped School of Agriculture, for the maintenance of which a special grant is provided by the State. This School affords opportunity for the training of students in science as applied to practical agriculture and kindred industries. The course occupies four years; the first is devoted to pure science; during the second the students are in residence at the State Research Farm, Werribee, engaged in practical farming with lectures on preparatory subjects. The remaining two years are devoted to a more specialized study of agriculture and allied subjects on a scientific basis.

Government Experimental Farms.

The Department of Agriculture conducts research and experimental work at the State Research Farm at Werribee, the Rutherglen Experimental Farm, the Longerenong Agricultural College, and at the School of Primary Agriculture, Burnley. In addition, there are experiments and demonstrations conducted on 43 selected farms throughout the State.

At the State Research Farm, Werribee, the main work is the improvement of wheat and other cereals, grasses, clovers and various economic plants, investigations into the methods and problems relating to irrigated agriculture, and the breeding and feeding of dairy cattle, horses, sheep and poultry.

Work at the Rutherglen Farm, which serves as a research station for the North-East, includes various aspects of cereal growing and pasture improvement. It was here that the initial experiments were conducted (1911-1918) which resulted in the widespread adoption of the topdressing of pastures with phosphates. At the substation at Longerenong experiments are conducted on wheat and oat cultivation for Wimmera conditions. At the School of Primary Agriculture, Burnley, a Plant Research Laboratory mainly devoted to plant pathological and entomological research has been established. Extension research work on the breeding and selection of grasses and clovers is also carried on.

The Government experimental plots on selected farms embrace investigations into pasture improvement, grazing trials, the cultivation of wheat, oats, potatoes, maize, broom millet and vegetables, and horticultural problems.

The pasture experiments are largely responsible for recent rapid advances made in pasture improvement throughout Victoria, in which approximately 1,000,000 acres are now annually topdressed with an estimated increase of approximately 50 per cent. in carrying capacity.

**Experimental
Farms and
Agricultural
Colleges.**

Various particulars relating to the State Experimental Farms and Agricultural Colleges are embodied in the next statement:—

GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1929.

Particulars.	Central Research Farm, Werribee.	Ruther- glen Farm, &c.	Dookie Agri- cultural College.	Longer- enong Agri- cultural College.	Burnley School of Primary Agricul- ture, &c.
	No.	No.	No.	No.	No.
Professional Staff	1	2	13	8	4
Hands employed	56	23	34	18	9
Students	11	10	94	49	80
	£	£	£	£	£
Value of plant and machinery ..	3,152	2,413	8,230	6,599	160
Value of produce for year ..	7,340	2,833	10,875	5,226	1,200
Receipts—					
Government Grant	11,464	5,778	8,210*	6,410*	2,272*
Fees .. ..	..	..	5,325	2,527	118
Sale of produce, &c.	7,340	2,833	9,482	3,898	1,019
Other	133	32	..	..	1
Total receipts	18,937	8,643	23,017	12,835	3,410
Expenditure—					
Salaries—					
Professional Staff	372	779	5,558	2,909	1,361
General Staff	6,663	4,857	5,349	2,820	1,340
Buildings and maintenance ..	2,398	1,731	12,110	7,106	709
Other	1,997	1,033	..	..	..
Total expenditure	11,430	8,400	23,017	12,835	3,410
Area under—	acres.	acres.	acres.	acres.	acres.
Cereals for Grain	550	210	560	558	..
Hay	267	120	200	246	2
Fruit trees, &c. .. ..	..	2	14	20	9
Vines .. ..	..	101	..	5	1
Green fodder	130	2	90	37	2
Other crops .. ..	..	12	2	50	1
Total area under crop	947	447	866	916	131
Area of land in fallow	780	178	580	524	41
Area under artificially sown grasses ..	350	180	..	..	9
Area resting	60	218	854	470	..
New ground broken up .. ..	..	..	..	100	..
Total area of arable land	2,137	1,023	2,300	2,010	27
Balance of area	74	330	3,626	376	6
Total area of farm	2,211	1,353	5,926	2,386	33
	No.	No.	No.	No.	No.
Live Stock—					
Horses	120	47	77	46	2
Dairy cows	78	15	72	33	4
All other cattle	78	21	39	16	2
Sheep	1,400	776	4,130	691	..
Pigs .. ..	..	8	157	165	..

* Including grant received from the Council of Agricultural Education.

**Inspection of
Orchards,
Nurseries, &c.**

The orchards, nurseries, and gardens of the State are systematically inspected by the officers of the Horticultural Division of the Department of Agriculture. Nurseries are inspected periodically, and action is taken in accordance with the condition of the plants in relation to disease or freedom therefrom. Old, worn-out, and infected orchards are destroyed.

The fear of introducing the fruit-flies and diseases arising from other causes has necessitated a thorough examination of fruit from Queensland, New South Wales, and elsewhere.

Plants and cuttings coming from foreign parts are subject to strict examination and to fumigation where it is considered necessary.

Forestry.

The State forests are controlled by a Commission of three, which was first appointed in 1919. The State has a wooded area of about 13,937,000 acres, of which about 4,330,450 acres are set aside as permanent State forests and timber reserves.

To encourage the growth of softwoods or conifers in both State and private plantations three large nurseries have been established at Creswick, Macedon, and Broadford. In addition to providing trees for the plantations, the nurseries supply considerable numbers of plants at low rates to State schools, public bodies and private applicants. This has proved of great benefit to the community by fostering an interest in tree planting generally, and especially by encouraging farmers to plant in order to afford protection to their homesteads and to provide shade and shelter for their flocks and herds.

The Forestry Fund was established in 1918 by Act No. 2976, and made applicable only to expenditure on the improvements and reforestation of State forests and the development of forestry. In each year the Treasurer makes a grant of £40,000 out of the Consolidated Revenue to the Fund, and also half of the amount in excess of £80,000 received from royalties, leases, licences, and permits.

The revenue derived from forest sources during the financial year 1929-30 was £128,645, and the expenditure was £220,875—£110,994 of which was paid out of the Consolidated Revenue, £55,264 under the Forests Loan Act No. 3386, and the balance—£54,617—from the Forestry Fund. The balance at the credit of the Fund at 30th June, 1930, was £18,897.

It is estimated that the quantity of timber produced in the rough, from Crown Lands, in 1929-30 was 7,951,594 cubic feet. In addition, 256,600 tons measurement (12,833,000 cubic feet) of fuel timber was produced.

Particulars of sawn timber and firewood, from all sources, will be found on page 426 of this volume.

Agriculture—
expenditure
and revenue
connected
with.

The State has rendered substantial assistance to the various branches of the agricultural and pastoral industries during past years. The appended table summarizes for the last five years the items of State expenditure from consolidated revenue in this direction, and shows the amount of revenue received by the Department of Agriculture:—

**EXPENDITURE AND REVENUE CONNECTED WITH
AGRICULTURE, 1925-26 to 1929-30.**

	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
<i>Expenditure.</i>	£	£	£	£	£
Administrative Branch ..	14,093	14,620	13,770	13,142	13,338
Agricultural Branch ..	21,412	31,270	38,018	36,330	37,400
Horticultural Branch ..	30,168	32,984	31,763	31,740	29,655
Stock and Dairy Branch ..	69,210	85,853	89,077	99,232	103,924
Maffra Beet Sugar Factory ..	85,825	55,891	89,941	73,288	90,553
Technical Agricultural and Viti- cultural Education, &c. ..	31,461	29,418	27,294	27,009	27,134
Development of Export Trade	48,362	60,875	60,946	62,625	56,425
Rabbit and Vermin Extermina- tion	88,874	91,929	85,200	81,377	71,277
Advances to Settlers for losses by bush fires, floods, &c. ..	18,587	32,987	21,150	14,004	5,241
Grants to Agricultural and Horticultural Societies, &c. ..	675	675	675	675	500
Miscellaneous	5,369	12,355	488	2,222	498
Total	414,036	448,857	458,322	441,644	435,945
<i>Revenue.</i>					
Maffra Beet Sugar Factory ..	137,997	79,435	58,900	84,183	81,694
Victoria Dock Cool Stores ..	27,886	32,455	28,205	52,558	34,486
All Other	49,661	52,985	50,432	58,908	54,478
Total	215,544	164,875	137,537	195,649	170,658

In addition to the expenditure shown, various sums have been advanced from loans and votes for the purpose of aiding closer settle-ment, for the resumption of mallee lands, for relief to farmers on account of bush fires and flood losses, and for purchase of seed wheat and fodder. These advances are gradually being repaid.

The expenditure from Loan Funds in 1929-30 was £1,623,594—£590,756 having been expended on discharged soldiers' land settle-ment, £846,691 on closer settlement, £20,538 on wire netting, and £165,609 on cultivation advances.

AGRICULTURE.

Progress of cultivation. All divisions of the State are suitable for cultivation. The area cultivated in 1929-30 was 8,061,920 acres, as compared with an annual average of 7,398,980 acres for the previous five seasons, 5,032,359 acres for the seasons 1905-15, and 3,547,111 acres for the seasons 1895-1905. Notwithstanding the great increase in the area cultivated, the dairying and pastoral industries show a considerable expansion. This is evidenced by a comparison of the exports of the principal products to overseas countries in the year 1900 with the annual average in the last five seasons. The values have risen as follows:—Butter and cheese from £1,252,277 to £2,694,923; milk and cream from £5,455 to £1,214,507; and meats from £502,285 to £1,634,767.

The following table shows the progress of cultivation from period to period during the last 75 years:—

ACREAGE CULTIVATED ANNUALLY, 1855 to 1930.

Period or Year (ending in March).				Annual Average.		
				Crop.	Fallow.	Total Cultivation.
				acres.	acres.	acres.
1855-65	..	..	..	325,676	12,146	337,822
1865-75	..	..	..	624,377	57,274	681,651
1875-85	..	..	..	1,306,920	137,536	1,444,456
1885-95	..	..	..	2,109,326	364,282	2,473,608
1895-1905	..	..	..	3,022,914	524,197	3,547,111
1905-15	..	..	..	3,756,211	1,276,148	5,032,359
1915-25	..	..	..	4,594,244	1,852,145	6,446,389
1926	..	..	..	4,433,492	2,457,136	6,890,628
1927	..	..	..	4,735,173	2,569,021	7,304,194
1928	..	..	..	4,942,258	2,692,044	7,634,302
1929	..	..	..	5,505,651	2,683,462	8,189,113
1930	..	..	..	5,579,258	2,482,662	8,061,920

Principal Crops (Area, Production, and Average Yield). The principal crops grown in the State are wheat, oats, barley, potatoes, and hay. The following tables contain particulars of the annual average area, production, and yield per acre for periods from 1855 to 1925 and for each of the last five seasons:—

ACREAGE, PRODUCTION, AND AVERAGE YIELD OF
FIVE PRINCIPAL CROPS, 1855 TO 1930.

Period or Year (ended March).	Wheat.*	Oats.*	Barley.	Potatoes.	Hay.
AVERAGE ANNUAL AREA.					
	acres.	acres.	acres.	acres.	acres.
1855-65 ..	119,001	83,296	4,843	24,123	80,117
1865-75 ..	278,077	129,384	19,262	36,744	117,393
1875-85 ..	776,031	147,343	41,188	39,089	226,775
1885-95 ..	1,236,501	210,901	64,310	48,009	437,087
1895-1905 ..	1,898,280	340,957	52,829	45,243	540,472
1905-15 ..	2,190,336	390,642	60,378	56,272	848,587
1915-25 ..	2,633,945	428,372	84,205	61,195	1,122,978
1926 ..	2,513,494	437,696	103,395	63,369	1,013,613
1927 ..	2,915,315	303,424	88,896	66,185	1,080,993
1928 ..	3,064,172	529,392	76,768	77,649	908,804
1929 ..	3,718,904	347,021	75,451	68,412	1,005,063
1930 ..	3,566,135	630,234	97,678	58,789	865,015
AVERAGE ANNUAL PRODUCTION.					
	bushels.	bushels.	bushels.	tons.	tons.
1855-65 ..	2,198,874	2,068,648	103,575	62,723	111,806
1865-75 ..	4,385,814	2,636,747	390,337	111,800	153,852
1875-85 ..	8,593,308	3,297,468	799,938	135,614	276,771
1885-95 ..	12,268,905	4,649,393	1,187,007	170,905	547,092
1895-1905 ..	14,032,145	6,649,453	947,580	134,357	672,982
1905-15 ..	22,906,743	7,342,468	1,243,442	158,445	1,084,726
1915-25 ..	39,171,358	7,965,864	1,923,654	169,864	1,511,298
1926 ..	29,255,534	4,998,165	1,774,963	160,729	929,068
1927 ..	46,886,020	4,884,006	1,920,722	162,909	1,387,971
1928 ..	26,160,814	4,682,724	1,552,109	230,348	1,001,251
1929 ..	46,818,833	5,602,409	1,556,118	140,158	1,267,437
1930 ..	25,412,587	5,058,541	2,183,325	171,747	963,089
AVERAGE ANNUAL YIELD PER ACRE.					
	bushels.	bushels.	bushels.	tons.	tons.
1855-65 ..	18.48	24.83	21.39	2.60	1.40
1865-75 ..	15.77	20.38	20.27	3.04	1.31
1875-85 ..	11.07	22.38	19.42	3.47	1.22
1885-95 ..	9.92	22.05	18.46	3.56	1.21
1895-1905 ..	7.39	19.50	17.94	2.97	1.25
1905-15 ..	10.46	18.79	20.59	2.82	1.28
1915-25 ..	14.87	18.60	22.84	2.78	1.35
1926 ..	11.64	11.42	17.17	2.54	0.92
1927 ..	16.08	16.10	21.61	2.46	1.29
1928 ..	8.54	8.85	20.22	2.97	1.10
1929 ..	12.59	16.14	20.62	2.05	1.26
1930 ..	7.13	8.03	22.35	2.92	1.11

* For grain.

Principal crops in Districts. The percentage in each district of the total area under each principal crop during last season was as given below :—

PERCENTAGE IN EACH DISTRICT OF TOTAL AREA UNDER EACH PRINCIPAL CROP, 1929-30.

Districts.	Percentage in each District of Area under—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	1·48	3·65	38·06	52·43	27·12	6·95
North-Central	0·80	2·18	2·86	18·62	2·50	2·09
Western	2·48	6·20	15·11	12·55	7·43	5·44
Wimmera	23·66	15·71	10·69	0·13	5·48	20·33
Mallee	51·26	52·45	10·02	0·00	13·57	42·01
Northern	18·45	17·48	11·69	0·06	19·76	17·99
North-Eastern	1·16	1·75	1·55	1·22	5·95	2·08
Gippsland	0·71	0·58	10·02	14·99	18·19	3·11

NOTE.—For counties contained in each District, see table on page 374.

The area under the principal crops in proportion to the total area under crop in each district during last season was as follows :—

RELATIVE AREAS DEVOTED TO DIFFERENT CROPS IN EACH DISTRICT, 1929-30.

Districts.	Percentage of Area under all Crops devoted to—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	13·62	5·93	9·59	7·95	37·62	25·29
North-Central	24·45	11·78	2·39	9·39	44·24	7·75
Western	29·10	12·86	4·86	2·43	41·90	8·85
Wimmera	74·37	8·73	0·92	0·01	14·23	1·74
Mallee	78·00	14·10	0·42	0·00	5·39	2·09
Northern	65·58	10·98	1·14	0·60	15·18	7·12
North-Eastern	35·53	9·54	1·31	0·62	34·42	18·58
Gippsland	14·56	2·09	5·64	5·07	34·81	37·83
Total for Victoria ..	63·92	11·30	1·75	1·05	15·50	6·48

NOTE.—For counties contained in each District, see table on page 374.

The area and produce of the principal crops per head of population are given in the next table for each of the last five years :—

AREA AND PRODUCTION OF FIVE PRINCIPAL CROPS
PER HEAD OF POPULATION, 1925-26 to 1929-30.

Year ended March—			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			Area per Head of Population.				
			acres.	acres.	acres.	acres.	acres.
1926	..	..	1·49	·26	·06	·04	·60
1927	..	..	1·70	·18	·05	·04	·63
1928	..	..	1·76	·30	·04	·04	·52
1929	..	..	2·11	·20	·04	·04	·57
1930	..	..	2·01	·35	·05	·03	·49
			Produce per Head of Population.				
			bushels.	bushels.	bushels.	tons.	tons.
1926	..	..	17·37	2·97	1·05	·10	·55
1927	..	..	27·39	2·85	1·12	·10	·81
1928	..	..	15·02	2·69	·89	·13	·57
1929	..	..	26·59	3·18	·88	·08	·72
1930	..	..	14·30	2·85	1·23	·10	·54

Except in the three seasons 1895-96, 1902-03, and 1914-15, the wheat produced during each year since 1870 has been more than sufficient to supply home consumption.

The following table gives the annual value of each of the five principal crops, based upon prices realized upon farms, also the value of each crop per acre for each of the last five years :—

VALUES OF FIVE PRINCIPAL CROPS.

Year ended March—			Annual Value of—				
			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			£	£	£	£	£
1926	..	..	6,665,150	684,320	290,166	1,309,470	3,497,253
1927	..	..	9,546,812	653,291	295,739	671,673	4,719,925
1928	..	..	4,724,369	688,804	297,327	388,537	3,683,272
1929	..	..	8,364,675	627,521	222,504	1,189,349	3,502,862
1930	..	..	3,559,063	554,547	300,202	691,273	2,998,282

VALUES OF FIVE PRINCIPAL CROPS—*continued*.

Year ended March—	Annual Value Per Acre of—																
	Wheat.			Oats.			Barley.			Potatoes.			Hay.				
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.		
1926	2	13	0	1	11	3	2	16	1	20	13	3	3	9	0
1927	3	5	6	2	3	1	3	6	6	10	3	0	4	7	4
1928	1	10	10	1	6	0	3	17	6	5	0	1	4	1	1
1929	2	5	0	1	16	2	2	19	0	17	7	8	3	9	8
1930	1	0	0	0	17	7	3	1	6	11	15	2	3	9	4

The value of the five principal crops was £8,103,367 in 1929-30, as against £13,906,911 in 1928-29, £9,782,309 in 1927-28, £15,887,440 in 1926-27, and £12,446,359 in 1925-26.

The principal wheat growing areas are the Wimmera, Mallee, and Northern districts. Although other districts provide only small proportions of the total area they are not to be regarded as unsuitable for wheat growing, as their average yield per acre is usually greater than in the areas mentioned. The production of wheat for grain in different counties for each of the last three seasons is shown in the following table:—

WHEAT YIELDS IN COUNTIES FOR THE LAST THREE SEASONS.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1928.	1929.	1930.	1928.	1929.	1930.	1928.	1929.	1930.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
Central—									
Bourke ..	15,440	17,569	19,142	270,998	187,705	465,098	17.55	10.68	24.30
Grant ..	21,931	28,473	27,679	372,044	334,394	661,521	16.96	11.74	23.90
Mornington ..	3,939	9,796	5,690	97,177	241,735	132,083	24.67	24.68	23.19
Elvelyn ..	268	484	277	5,998	5,906	5,880	22.38	12.20	21.23
Total ..	41,578	56,322	52,794	746,217	769,740	1,264,582	17.95	13.67	23.95
North-Central—									
Anglesey ..	1,006	1,233	1,187	23,420	21,712	21,185	23.28	17.61	17.85
Dalhousie ..	2,376	2,778	2,626	49,020	44,380	51,658	20.63	15.97	19.67
Talbot ..	17,414	24,497	24,713	320,930	531,674	424,746	18.43	21.70	17.19
Total ..	20,796	28,508	28,526	393,370	597,746	497,589	18.91	20.97	17.44
Western—									
Grenville ..	11,741	14,393	17,330	265,754	222,574	437,147	22.63	15.46	25.22
Polwarth ..	182	192	427	3,919	3,855	12,792	21.53	20.08	29.96
Heytesbury ..	37	129	47	769	2,882	1,089	20.78	22.34	23.17
Hampden ..	13,945	15,208	18,062	317,640	304,866	492,035	22.78	20.05	27.24
Ripon ..	34,601	35,315	43,712	798,140	858,593	1,364,893	23.07	24.31	31.22
Villiers ..	2,279	2,286	2,502	53,072	47,695	63,647	23.29	20.86	25.44
Normanby ..	1,432	1,689	1,769	34,227	38,393	22,470	20.26	21.70	21.70
Dundas ..	2,348	3,227	4,322	51,060	62,232	88,917	21.75	19.28	20.57
Follett ..	879	456	205	6,706	7,296	4,060	17.69	16.00	19.80
Total ..	66,944	72,895	88,376	1,529,238	1,544,220	2,502,973	22.34	21.18	28.32

WHEAT YIELDS IN COUNTIES FOR THE LAST THREE SEASONS—continued.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1928.	1929.	1930.	1928.	1929.	1930.	1928.	1929.	1930.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
Wimmera—									
Lowan ..	194,984	244,527	225,450	3,058,292	4,987,673	4,117,933	15·68	20·40	18·27
Borong ..	430,174	535,993	458,327	4,936,717	9,733,168	3,312,575	11·48	18·16	7·23
Kara Kara ..	146,267	169,932	159,996	2,097,317	2,942,927	951,862	14·34	17·32	5·95
Total ..	771,425	950,452	843,773	10,092,326	17,663,768	8,382,370	13·08	18·58	9·93
Mallee—									
Millewa ..	116,028	182,497	222,320	16,991	626,812	5,460	0·15	3·43	0·02
Weeah ..	196,772	229,109	240,707	829,774	1,893,443	598,709	4·22	8·26	2·49
Karkaroc ..	708,307	848,101	870,597	2,826,285	6,608,066	1,963,605	3·99	7·79	2·26
Tatchera ..	439,549	532,496	494,448	1,224,703	4,706,695	1,136,326	2·79	8·84	2·30
Total ..	1,460,656	1,792,203	1,828,072	4,897,753	13,835,216	3,704,100	3·35	7·72	2·03
Northern—									
Gunbower ..	56,904	50,859	38,569	204,945	500,229	278,260	3·60	9·84	7·21
Gladstone ..	121,205	151,151	128,972	1,327,972	2,303,107	722,520	10·96	15·24	5·60
Bendigo ..	133,796	160,727	148,679	1,133,701	2,516,889	1,216,389	8·47	15·66	8·47
Rodney ..	81,599	98,644	89,706	858,107	1,643,880	1,170,328	10·52	16·06	13·05
Moir ..	244,329	282,211	257,234	3,524,600	4,166,493	4,156,583	14·43	14·76	16·16
Total ..	637,833	743,592	658,160	7,049,325	11,130,598	7,544,080	11·05	14·97	11·46
North-Eastern—									
Delatite ..	8,623	9,091	7,987	170,842	137,554	191,098	19·81	15·13	23·93
Bogong ..	35,488	37,698	32,846	729,722	630,317	732,952	20·56	16·72	22·31
Benambra ..	261	281	300	5,864	4,469	7,606	22·47	15·10	25·35
Wonnangatta ..	..	11	..	..	240	..	..	21·82	..
Total ..	44,372	47,081	41,133	606,428	772,580	931,656	20·43	16·41	22·65
Gippsland—									
Croajingolong ..	9	5	22	134	70	323	14·39	14·00	14·68
Tambo ..	146	493	312	3,435	8,533	9,464	23·58	17·31	30·33
Dargo ..	1,141	1,562	1,324	27,281	30,391	39,068	23·91	19·46	29·51
Tanjil ..	16,845	21,109	21,191	456,906	380,310	438,018	27·12	18·02	23·03
Buln Buln ..	2,427	4,682	2,452	58,401	85,661	48,364	24·06	18·30	19·72
Total ..	20,568	27,851	25,301	546,157	504,965	585,237	26·55	18·13	23·13
Total (State)	3,064,172	3,718,904	3,566,135	26,160,814	46,818,833	25,412,587	8·54	12·59	7·13

The production of wheat in the other Australian States in 1929–30 was as follows :—New South Wales, 33,948,000 bushels ; South Australia, 23,345,093 bushels ; Western Australia, 39,081,183 bushels ; Queensland, 4,235,172 bushels ; and Tasmania, 376,000 bushels. The total production for the Commonwealth was 126,425,773 bushels.

Varieties of
Wheat, etc.,
and Manure
used.

Australian wheat is noted for its hard, white, and dry qualities, and, on account of the whiteness of the flour made therefrom, it is much sought after by oversea millers for the purpose of mixing with other wheats.

Enquiries in regard to the area sown under each variety of wheat, the quantity of seed sown, and the manure used, per acre, during the last four seasons, were made with the view of enabling the Agricultural Department to advise growers as to the most suitable varieties and the quantities to use in a particular district.

Analyses of the replies of the growers (approximately 70 per cent. replied) are given in the appended tables :—

VARIETIES OF WHEAT SOWN IN VICTORIA.

Variety.	1927-28.		1928-29.		1929-30.		1930-31.	
	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.
Free Gallipoli ..	5	5.47	2	10.56	1	22.20	1	34.53
Federation ..	1	38.42	1	33.41	2	19.80	2	18.93
Ranee ..	3	5.95	3	10.10	3	12.74	3	13.13
Sepoy ..	21	.31	17	.88	8	2.95	4	5.66
Major ..	4	5.62	6	4.52	5	5.38	5	4.56
Currawa ..	2	9.51	4	7.76	4	7.02	6	4.36
Penny ..	6	4.44	5	4.58	6	4.22	7	3.68
Nizam ..	16	1.41	7	3.28	7	3.69	8	3.27
Joffre ..	10	2.66	10	2.69	9	2.48	9	1.95
Nabawa ..	29	.17	19	.47	16	1.34	10	1.85
Rajah ..	7	3.46	8	2.95	10	2.44	11	1.65
Yandilla King ..	9	2.77	13	2.00	11	1.90	12	1.37
Bald Early ..	8	3.14	9	2.80	12	1.75	13	1.13
Wannon ..	14	2.01	11	2.19	13	1.63	14	.99
Gluyas ..	11	2.47	12	2.05	14	1.61	15	.92
Huf's Imperial ..	15	1.96	14	1.85	17	1.13	16	.78
Mac's White ..	12	2.15	15	1.42	15	1.57	17	.74
Ghurka ..	32	.16	31	.13	21	.29	18	.60
Turvey ..	13	2.09	16	1.30	18	.94	19	.59
Waratah ..	22	.25	18	.47	20	.48	20	.53
Strongbolt ..	25	.23	27	.15	19	.49	21	.46
Bena ..	43	.05	25	.18	22	.29	22	.39
Tusean White ..	36	.09	29	.13	26	.22	23	.21
Graham ..	18	.45	22	.32	23	.25	24	.17
Yanward ..	19	.44	21	.35	24	.23	25	.16
Other Varieties ..	..	4.32	..	3.46	..	2.96	..	2.39
..	..	100.00	..	100.00	..	100.00	..	100.00

In all, over 130 varieties of wheat were sown. The number of these which were tried in the Mallee greatly exceeded the number experimented with in any other district. A more extended list showing the area and percentage of each variety, and the ten principal varieties grown in each district, can be obtained on application to the Government Statist.

ESTIMATED PERCENTAGE OF TOTAL AREA UNDER WHEAT,
AND SEED AND MANURE USED, 1930-31.

District.	Percentage (according to acreage) of total area in the State.	Weight per acre of—	
		Seed Sown.	Manure Used.
	per cent.	lbs.	lbs.
Central	1.51	90	106
North Central	0.87	90	93
Western	2.53	87	135
Wimmera	24.62	69	81
Mallee	50.34	53	56
Northern	18.47	69	82
North Eastern	1.04	75	93
Gippsland	0.62	84	96
Total State	100.00	62	71

The rate of sowing, in the principal wheat growing counties, ranged from 41 lbs. of seed per acre in the County of Millewa to 90 lbs. in Talbot. Manure used varied from 39 lbs. per acre in Millewa to 144 lbs. in Ripon.

The weight of an imperial bushel of wheat is 60 lbs., but the actual weight of a bushel of Victorian wheat of the fair average quality standard annually fixed by the Chamber of Commerce was 61.425 lbs. on the average of the last ten years. The following statement shows the variation in the f.a.q. standard weight of a bushel of Victorian wheat for each season since 1919-20 :—

F.A.Q. WHEAT STANDARD, 1921 to 1930.

Season ended March—			Weight of Bushel (f.a.q.).	Season ended March—			Weight of Bushel (f.a.q.).
			lbs.				lbs.
1921	..	..	60½	1926	..	..	61½
1922	..	..	60	1927	..	..	61½
1923	..	..	61½	1928	..	..	61½
1924	..	..	61	1929	..	..	62
1925	..	..	62½	1930	..	..	62

**Stocks of
wheat and
flour.**

It is estimated that about 13,750,000 bushels of wheat are required locally for food and seed. The stocks of wheat and flour in the State at 31st October in each of the last five years were as follows :—

WHEAT AND FLOUR ON HAND, 1926 to 1930.

At 31st October—				Quantity in Bushels.		
				Wheat.	Flour (equivalent in Wheat).	Total.
1926	..	..	..	1,629,124	472,750	2,101,874
1927	..	..	..	3,595,800	1,406,600	5,002,400
1928	..	..	..	2,995,000	995,400	3,990,400
1929	..	..	..	4,362,300	1,090,100	5,452,400
1930	..	..	..	6,126,500	1,305,400	7,431,900

Oats.

In addition to the area under oats harvested for grain last season as shown in the table on page 371, there were 675,256 acres cut for hay, so that the total area sown with oats was 1,305,490 acres. During 1929-30 there were exported from Victoria to overseas countries 69,922 bushels of oats and 61,652 lbs. of oatmeal, etc. Enquiries in regard to the different kinds of oats sown for the 1930-31 season showed that, of those growers who supplied the information, 91 per cent. planted principally Algerian, and 5 per cent. Mortgage Lifter oats.

Barley.

The area under barley in 1929-30 was 97,678 acres, of which 65,740 were under malting, and 31,938 under other barley. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the last five years :—

BARLEY PRODUCTION, 1925-26 to 1929-30.

Year ended March—	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.
1926 ..	72,244	31,151	1,189,081	585,882	16·46	18·81	17·17
1927 ..	59,935	28,961	1,186,733	733,989	19·80	25·34	21·61
1928 ..	50,005	26,763	866,213	685,896	17·32	25·63	20·22
1929 ..	49,345	26,106	945,865	610,253	19·17	23·38	20·62
1930 ..	65,740	31,938	1,378,022	805,303	20·96	25·21	22·35

During 1929-30, 1,909,923 bushels of barley were used locally in the production of 1,867,907 bushels of malt.

Hay. Of the total hay produced in 1930, as shown in the table on page 371, 802,933 tons were oaten, 119,124 tons were wheaten, and 41,032 tons were made from lucerne and other crops; the yields per acre of these varieties of hay were 1·19, 0·72, and 1·70 tons respectively. The quantity of straw returned for the season 1929-30 was 29,839 tons.

Prices of agricultural produce. Information is obtained direct from growers, in February or March of each year, in regard to the prices of the leading agricultural products other than the main crop of potatoes, the price of which is ascertained in June or July. The following table gives the average price of each product for each of the last ten years:—

PRICES OF PRODUCE, 1921 TO 1930.

Year.		Average Price in February and March.						
		Wheat.	Oats.	Barley.		Hay.	Potatoes.	
				Malting.	Other.		Early Crop.	Main Crop (after March).
		per bushel. s. d.	per bushel. s. d.	per bushel. s. d.	per bushel. s. d.	per ton. s. d.	per ton. s. d.	per ton. s. d.
1921	..	7 3	2 4½	4 0½	3 1	53 0	101 0	64 0
1922	..	4 9½	3 0¾	4 0¼	2 11	57 0	94 0	60 0
1923	..	4 6	3 6	3 11	3 0	76 0	170 0	136 0
1924	..	4 3	3 1¼	3 9½	3 2¼	72 0	111 0	53 0
1925	..	5 0¾	1 11½	5 3¾	4 0½	48 9	121 0	94 0
1926	..	4 6¾	2 9	3 4¾	3 0	75 3	194 0	158 0
1927	..	3 9¼	2 5¼	3 0	2 6¾	64 9	170 0	69 0
1928	..	3 1½	2 5¾	4 0¼	3 1½	70 0	84 0	28 0
1929	..	3 3	2 0	3 0	2 1½	52 0	158 0	169 0
1930	..	2 3¼	1 9¾	2 9½	2 3	59 0	143 0	71 0

NOTE.—The above prices represent the f.o.b. values less the following deductions:—
 Prior to 1925—Freight and handling charges.
 1925 and 1926 " " " and cost of bags and seed.
 1927 to 1930 " " " " " " seed and manure.

Other Crops. The area under other than principal crops and the production since March, 1927, are shown in the subjoined table:—

OTHER THAN PRINCIPAL CROPS, 1927-28 to 1929-30.

Crop.	1927-28.		1928-29.		1929-30.	
	Area.	Production.	Area.	Production.	Area.	Production.
	acres.	bushels.	acres.	bushels.	acres.	bushels.
Maize, for grain	17,645	757,780	16,077	679,810	17,640	533,719
Rye	791	11,122	711	10,994	854	11,068
Peas	10,615	139,621	6,743	108,607	8,438	193,640
		tons.		tons.		tons.
Mangel-wurzel ..	568	9,451	429	5,301	486	5,539
Beet, Carrots, Parsnips and Turnips	207	1,629	243	2,079	243	1,798
Onions	7,659	32,936	7,673	29,700	7,828	43,646
Green Forage ..	94,895	..	107,351	..	169,253	..
Grass and Clover Seeds ..	758	bushels. 4,852	1,486	bushels. 20,844	1,670	bushels. 25,696
		cwt.		cwt.		cwt.
Hops	294	3,843	281	3,676	201	3,713
Tobacco	1,176	9,055	1,317	9,375	1,822	†
Vines—Grapes	40,988	2,275,770	41,565	4,117,757	40,594	4,040,230
		cwt.		cwt.		cwt.
Flax	46	100 fibre 83 tow	109	826 seed 236 fibre 239 tow	703	2,840 seed 760 fibre 980 tow
Gardens and Orchards ..	81,397	..	79,322	..	80,820	..
Minor Crops* ..	9,450	..	8,863	..	9,645	..
Land in Fallow	2,692,044	..	2,683,462	..	2,482,662	..
Lucerne† ..	118,461	..	127,175	..	138,781	..
Artificial Grasses†	887,052	..	1,027,543	..	1,002,376	..

* For details see page 385.

† Not available.

‡ Not cut for seed or hay.

Maize. The area under maize for grain in 1929-30 was 17,640 acres, and the production was 533,719 bushels, which represented a yield of 30·26 bushels per acre. Of the total production for last season 90 per cent. was obtained from the Gippsland district. The area, total production, and produce per acre are given in the next table for each of the last ten seasons and for periods prior thereto back to 1890:—

MAIZE PRODUCTION, 1890 to 1930.

Period or Year (ending in June).	Annual Average.		
	Area under Maize for Grain.	Production.	Produce per Acre.
	acres.	bushels.	bushels.
1890-1900	8,688	452,907	52·13
1900-10	12,082	716,158	59·27
1910-20	20,811	922,461	44·33
1921	24,149	1,065,880	44·14
1922	23,227	951,960	40·99
1923	25,846	879,915	34·04
1924	29,104	1,464,731	50·33
1925	23,126	891,987	38·57
1926	21,913	768,761	35·08
1927	20,046	685,407	34·19
1928	17,645	757,780	42·95
1929	16,077	679,810	42·28
1930	17,640	533,719	30·26

On the average of the last five seasons the yield per acre was 36·71 bushels, as against 45·0 in 1910-15, and 65·4 in 1900-05. The relatively light yield per acre for the latest five-year period was probably due to the cultivation of new areas, which are less fertile than the rich river flats upon which this cereal was grown exclusively in earlier periods.

Onions are grown in nearly every county south of the Dividing Range. The returns for last season show that in Villiers, the yield was 9,561 tons from 1,520 acres; in Grenville, 8,573 tons from 1,769 acres; in Polwarth, 6,302 tons from 1,070 acres; in Bourke, 6,470 tons from 1,027 acres; in Grant, 5,616 tons from 1,023 acres; in Buln Buln, 4,150 tons from 786 acres; and in Mornington, 2,417 tons from 512 acres. The following statement shows the area and yield for each of the last five years :—

ONION PRODUCTION 1925-26 to 1929-30.

Year ended March—	Area.	Produce.
	acres.	tons.
1926	5,379	21,728
1927	8,471	43,928
1928	7,659	32,936
1929	7,673	29,700
1930	7,828	43,645

The value of onions grown was £74,704 in 1929-30, as compared with £187,233 in 1928-29, £188,186 in 1927-28, £110,839 in 1926-27, and £267,793 in 1925-26.

Tobacco. Tobacco production reached its maximum in 1880-81, when 17,333 cwt. of dry leaf was produced. Subsequent years were marked by great variations in area and produce, but during the last two years a considerable improvement in the acreage

planted has taken place—that for 1929-30 being the largest since 1895-6. The area devoted to this product last year was 1,822 acres, of which 957 were in Delatite, 628 in Bogong, and 129 in Borung. Particulars relating to the cultivation of tobacco for each of the last five years are as follows :—

TOBACCO PRODUCTION, 1925-26 to 1929-30.

Year ended June—					Area.	Produce.
					acres.	cwt. (dry).
1926	..	..	..	..	1,179	7,871
1927	..	..	..	..	1,154	3,454
1928	..	..	..	..	1,176	9,055
1929	..	..	..	..	1,317	9,375
1930	..	..	..	..	1,822	*

* Not available.

Vine

Production.

The area under vines and the number of growers have shown a fairly large increase over the last fifteen years.

Vineyards are distributed fairly well over the State, and there are certain districts where the principal industries are connected with vine-growing. The Shire of Mildura produced last season 3,325,910 cwt. of grapes; Swan Hill, 539,084 cwt.; Rutherglen, 87,820 cwt.; and Rodney, 17,626 cwt. At Mildura the crop is principally dried for raisins and currants. The results of five years' operations are given below :—

VINE PRODUCTION, 1926 to 1930.

Year ended June—	Number of Growers.	Area.		Produce.				
		Bearing.	Not Bearing.	Grapes gathered.	Wine made.	Raisins made.		Currants made.
						Lexias.	Sultanas.	
		acres.	acres.	cwt.	gallons.	cwt.	cwt.	cwt.
1926 ..	2,876	36,091	4,621	2,253,884	1,637,274	54,021	297,485	123,733
1927 ..	2,832	37,340	3,272	3,587,224	2,346,314	75,296	582,418	135,464
1928 ..	2,774	37,974	3,014	2,275,770	2,353,890	75,672	326,649	73,101
1929 ..	2,746	38,689	2,876	4,117,757	1,942,701	94,520	676,599	189,985
1930 ..	2,701	38,327	2,267	4,040,230	1,363,575	95,255	688,399	178,226

Of the total quantity of grapes gathered in 1930, it is estimated that 191,125 cwt. were used for making wine and spirits, 3,772,206 cwt. for raisins and currants, and 76,899 cwt. for table consumption and export. Of the 688,399 cwt. of sultanas made, 576,288 cwt. were from Mildura, and 110,014 cwt. from Swan Hill.

Raisins and currants are produced in Victoria upon a scale far in excess of the State's requirements. During 1929-30 the following quantities were exported oversea :—Sultanas, 491,626 cwt., valued

at £1,059,062; lexias, 37,973 cwt., valued at £68,019; raisins, other, 678 cwt., valued at £1,463; and currants, 136,116 cwt., valued at £288,768.

The area of orchards growing fruit for sale in 1929-30—79,000 acres—showed an increase of 1,378 acres as compared with the area for the previous year. Orchards are distributed over the whole State, and the counties having the largest areas in the season 1929-30 were as follows:—Mornington, 15,110 acres; Bourke, 11,576 acres; Evelyn, 10,883 acres; Rodney, 10,005 acres; Moira, 8,311 acres; Talbot, 3,975 acres; and Bendigo, 3,055 acres. Details of the produce from such orchards in the last five years are given in the subjoined statement:—

ORCHARDS GROWING FRUIT FOR SALE,
1925-26 to 1929-30.

Year ended March—	Number of Fruit-growers.	Area of Gardens and Orchards.	LARGE FRUITS GATHERED.					
			Apples.	Pears.	Quinces.	Plums.	Prunes.	Cherries.
		acres.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1926	7,673	80,251	2,063,214	840,113	81,365	203,334	50,408	69,639
1927	7,425	81,301	543,106	500,995	42,695	172,724	37,060	29,317
1928	7,209	79,293	3,712,350	1,053,481	115,606	231,728	79,481	47,795
1929	7,119	77,622	626,294	772,216	76,868	165,658	76,237	51,765
1930	7,241	79,000	2,779,107	1,166,418	84,894	204,583	86,298	46,060

Large Fruits Gathered—continued.								
	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Nectarines.	Passion.	Other.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1926	1,221,582	247,600	286,216	131,154	22,568	15,289	10,495	860
1927	925,353	440,423	276,407	112,570	16,474	9,274	22,289	6,311
1928	1,350,701	416,277	378,101	162,860	18,125	23,142	22,072	3,608
1929	1,043,840	468,536	354,817	137,684	18,776	12,451	38,105	1,656
1930	1,191,253	447,131	385,106	114,081	17,898	19,210	13,063	6,313

	BERRY FRUITS GATHERED.					NUTS GATHERED.			
	Rasp-berries.	Straw-berries.	Goose-berries.	Logan-berries.	Other.	Almonds.	Walnuts.	Filberts.	Chest-nuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1926	3,548	4,022	4,675	3,653	2,557	71,480	61,845	201	16,793
1927	1,283	1,877	1,322	1,364	346	68,315	31,254	59	15,495
1928	3,295	4,958	4,449	4,859	1,760	66,783	30,236	148	26,066
1929	2,210	6,522	3,038	3,403	1,269	115,835	47,094	205	22,965
1930	3,056	12,047	6,456	5,395	1,783	63,332	24,244	654	18,476

The effects of the dry season and the ravages of the "thrip" pest, during 1926-27, are shown in the above table, except in the yields of apricots and passion fruit. In 1927-28, the yield for all fruits was exceptionally heavy; that for pome and citrus fruits constituting a record. In most cases, the yield for 1928-29 was very low, the apple crop, in particular, being little more than that for the 1926-27 season. In the season 1929-30 there was a return to normal, the yield of practically all fruits being well up to the average.

In addition to the fruits shown, large quantities of melons, rhubarb, and tomatoes were produced in the orchards, the following being the quantities returned for 1929-30:—Melons, 8,741 cwt.; rhubarb, 12,975 dozen bundles; and tomatoes, 221,092 bushels. There were also 1,820 acres laid down in gardens growing fruit for private use; the value of the produce from these was estimated at about £9,100.

Fruit Trees. Information relating to the number of trees of each variety (bearing and non-bearing) for the years 1925-26 and 1928-29 appears on page 565 of the *Victorian Year-Book* for 1928-29.

Value of fruit sold. According to prices received by growers the value of fruit which reaches market was estimated to be £1,247,700 in 1925-26, £970,831 in 1926-27, £1,189,356 in 1927-28, £1,093,434 in 1928-29, and £927,723 in 1929-30. This, of course, does not represent the actual value of all the fruit grown, as large quantities are privately consumed in various ways. No very reliable estimate of the value of such fruit can be prepared, but it may be set down at about £40,000.

Market gardens. The area under market gardens in the year 1929-30 was 21,210 acres. As these gardens are generally situated near large centres of population, the producers are able to dispose of the bulk of their goods with a minimum loss from waste, &c. An average return of £50 per acre is regarded as a fair estimate of their value, and on this basis the total value of the produce may be given as £1,060,500. This does not include crops of one acre and over of potatoes, onions, mangel-wurzel, beet, carrots, parsnips, and turnips grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

Dried fruit (exclusive of Raisins and Currants). The quantity of dried fruit (weight after drying) was first collected in 1895-96, when 179,460 lbs. were returned. During 1929-30 the quantity produced was 1,519,762 lbs., which was 48,366 lbs. less than the quantity for the previous year. The production of the various kinds of dried fruit, with the exception of raisins and currants, the particulars of which appear on page 382, is shown in the following statement for each of the last five seasons:—

DRIED FRUIT, 1925-26 to 1929-30.

Year ended June—	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Pears.	Nectarines.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1926 ..	4,569	307,377	232,170	213,764	29,301	89,025	8,163	884,369
1927 ..	2,840	313,390	107,933	278,796	9,966	43,333	66	756,324
1928 ..	3,351	610,073	305,984	188,085	10,245	85,396	4,424	1,207,558
1929 ..	2,194	760,216	136,033	586,140	7,635	71,591	4,269	1,563,128
1930 ..	3,424	848,811	234,032	343,490	6,878	82,267	860	1,519,762

Features of the returns for the season 1929-30, as compared with those for the previous year, are the increases in prunes and peaches and the large decrease in apricots.

The following is a return of the minor crops for the last two seasons. The items do not in all cases represent the whole of the respective crops grown, but refer only to such as were taken cognisance of by the collectors. The return, therefore, indicates the nature of the crops rather than the full extent of their cultivation:—

MINOR CROPS, 1928-29 AND 1929-30.

Crop.	1928-29.		1929-30.	
	Area.	Produce.	Area.	Produce.
	acres.		acres.	
Artichokes	4	12 tons	3	15 tons
Beans	1,295	17,353 bushels	1,815	17,859 bushels
Chicory	589	353 tons (dry)	469	319 tons (dry)
Flowers	358	..	355	..
Garlic	28	43 tons	2	4 tons
Flax—New Zealand ..	70	*	70	*
Herbs and Scent Plants..	3	..	33	..
Millet—Broom	1,337	{ 4,465 cwt. fibre 3,729 cwt. seed }	1,677	{ 5,428 cwt. fibre 3,583 cwt. seed }
.. Japanese	370	1,840	†	†
Nurseries	1,216	..	1,266	..
Pumpkins	1,204	5,416 tons	1,231	5,174 tons
Seeds—Agricultural and Garden	119	..	67	..
Sugar Beet	2,130	{ 15,237 tons clean beet, pro- ducing 2,108 tons market- able sugar }	2,500	{ 26,525 tons clean beet, pro- ducing 3,472 tons market- able sugar }
Sunflowers	140	1,451 cwt.	157	1,079 cwt.
Total	8,863	..	9,645	..

* Only cut every third year. † All cut for green fodder.

The practice of fallowing has become very popular in recent years. This is no doubt due to the more enlightened methods adopted, especially in wheat farming, where results have justified the introduction of extensive fallowing in conjunction with heavy manuring. The acreage in fallow in the years 1901, 1906, 1911, 1916, 1921, and each of the last five years was as follows :—

LAND IN FALLOW.

Year ended March—			Acres.	Year ended March—			Acres.
1901	..	..	602,870	1926	..	..	2,457,136
1906	..	..	1,049,915	1927	..	..	2,569,021
1911	..	..	1,434,177	1928	..	..	2,692,044
1916	..	..	1,358,343	1929	..	..	2,683,462
1921	..	..	1,935,747	1930	..	..	2,482,662

Nearly all of the fallowed area is devoted to wheat production. Of the 2,482,662 acres in fallow last season, 815,959 were in the Wimmera, 989,548 in the Mallee, and 440,580 in the Northern District. The total for these three districts represented 90 per cent. of the land fallowed in the State.

The increase in the proportion of farmers using manure indicates the popularity and the value of this method of treating the soil. The following table shows the number of farmers using manure, and the quantity used, in 1901, 1906, 1911, 1916, 1921, and each of the last four years:—

MANURE USED FOR FERTILIZATION. 1901 TO 1929.

Year.			Farmers using.	Area used on.	Manure used—	
					Natural.	Artificial.
				acres.	tons.	tons.
1901	..	..	11,439	556,777	153,611	23,535
1906	..	..	23,072	1,985,148	205,906	60,871
1911	..	..	26,159	2,676,408	205,739	82,581
1916	..	..	33,165	3,870,742	181,268	117,812
1921	..	..	37,835	3,848,184	161,683	150,012
1926	..	..	41,795	4,601,239	142,334	214,234
1927	..	..	43,682	5,148,144	140,410	240,715
1928	..	..	43,962	5,753,116	114,345	257,498
1929	..	..	45,426	6,022,951	120,991	269,967

NOTE.—The average weight of manure used per acre in each district will be found on page

Portion of the increase in the area on which manure is used is accounted for by the increasing practice of treating pastures with artificial fertilizers. During 1929-30 the quantity of fertilizers imported into Victoria from overseas countries was 199,233 tons valued at £537,828. This included 188,319 tons of rock phosphates valued at £433,633, most of which came from the Pacific Islands.

Persons employed on Farming, Dairying, and Pastoral Holdings. Information is obtained by the collectors of agricultural statistics each year as to the number of persons ordinarily employed upon the land occupied. For the last five years the numbers were as follows :—

NUMBER OF PERSONS EMPLOYED UPON FARMING, DAIRYING, AND PASTORAL HOLDINGS, 1925 to 1929.

Year.	Males.	Females.	Total.
1925	98,059	19,124	117,183
1926	96,791	17,619	114,410
1927	95,639	13,841	109,480
1928	98,296	14,508	112,804
1929	101,044	11,553	112,597

Persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are not included in the above tabulation, neither are domestic servants nor cooks. Only females who are wholly engaged in outdoor duties are included. It is estimated that the temporary labour employed on farms and pastoral holdings is equivalent to about 30,000 men employed continuously throughout the year.

Wages—agricultural and pastoral. In the next return will be found particulars of the rates of wages paid (with rations) upon farms and pastoral holdings during 1929-30. The information has been furnished by the occupiers of holdings.

WAGES, AGRICULTURAL AND PASTORAL, 1929-30.

Occupations.	Range.	Prevailing Rate.
Ploughmen	30s. to 80s. per week ..	50s. per week
Farm labourers	25s. to 70s. per week ..	45s. per week
Threshing machine hands ..	1s. to 2s. per hour ..	1s. 4d. per hour
Harvest hands	10s. to 15s. per day ..	13s. per day
Milkers	20s. to 60s. per week ..	35s. per week
Maize pickers (without rations)	6d. to 9d. per bag ..	8d. per bag
Married couples	50s. to 90s. per week ..	67s. 6d. per week
Female servants	20s. to 40s. per week ..	27s. 6d. per week
Shearers, hand (without rations)	35s. to 50s. per 100 sheep	40s. per 100 sheep
„ machine (without rations)	40s. to 60s. per 100 sheep	41s. per 100 sheep
Gardeners, market	30s. to 60s. per week ..	40s. per week
„ orchard	35s. to 60s. per week ..	45s. per week
Vineyard hands	40s. to 85s. per week ..	50s. per week

PASTORAL AND DAIRYING INDUSTRIES.

Live Stock. The pastoral and dairying industries have always been important sources of wealth to the State, and their increasing value in recent years, despite the larger areas devoted to cultivation, indicates that both pastures and stock are, on the whole, steadily improving. The progress of stock breeding is shown in the next table, which gives the numbers of horses, dairy cows, other cattle, sheep and pigs, and their numbers per head of population and per square mile, in each of the last seven census years, also in the year 1930 :—

LIVE STOCK IN VICTORIA, 1861 TO 1930.

Year ended March—	Horses (including Foals).	Cattle—		Sheep.	Pigs.
		Dairy Cows.	Other.		
	number.	number.	number.	number.	number.
1861	76,536	197,332	525,000	5,780,896	61,259
1871	209,025	212,193	564,534	10,477,976	180,109
1881	275,516	329,198	957,069	10,360,285	241,936
1891	436,469	395,192	1,387,689	12,692,843	282,457
1901	392,237	521,612	1,080,772	10,841,790	350,370
1911	472,080	668,777	878,792	12,882,665	333,281
1921	487,503	620,005	955,154	12,171,084	175,275
1930	393,015	619,416	715,826	17,427,203	265,978
<i>Per Head of Population.</i>					
1861	·14	·37	·97	10·70	·11
1871	·29	·29	·77	14·32	·25
1881	·32	·38	1·11	12·01	·28
1891	·38	·35	1·22	11·13	·25
1901	·33	·43	·90	9·03	·29
1911	·36	·51	·67	9·79	·25
1921	·32	·41	·63	7·99	·12
1930	·22	·35	·40	9·81	·15
<i>Per Square Mile.</i>					
1861	·87	2·25	5·97	65·78	·70
1871	2·38	2·41	6·42	119·22	2·05
1881	3·14	3·75	10·89	117·88	2·75
1891	4·97	4·50	15·79	144·43	3·21
1901	4·46	5·94	12·30	123·36	4·00
1911	5·37	7·61	10·00	146·59	3·79
1921	5·55	7·05	10·87	138·49	1·99
1930	4·47	7·05	8·15	198·30	3·03

By reducing horses and cattle to an equivalent in sheep on the assumption that one of the former will eat as much as ten, and one of the latter as much as six sheep, interesting comparisons of the stock carried on the land at different periods may be instituted. Calculations made on this basis show that each square mile carried an equivalent of 334 sheep in 1930, as compared with 302 in 1921, 306 in 1911, and 237 in 1881.

Size of Holdings.

On pages 572 to 575 of the 1928-29 issue of this work will be found detailed information relating to the number and size of holdings and the live stock, cultivation, &c., on different sized holdings for the year 1929, also certain comparative figures for the years 1913, 1919, and 1925.

Land occupied in different districts.

The following tables give information relating to land occupied in each district in March, 1930 :—

LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1930.

(Areas of 1 acre and upwards.)

Districts.	Total Area of Districts.	Number of Occupiers.	Acres Occupied.				
			For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.	Total.
				Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
	acres.						
Central ..	4,065,280	16,782	462,331	235,299	1,842,790	224,521	2,764,941
North-Central ..	2,929,920	5,399	138,868	36,093	1,999,422	50,192	2,224,575
Western ..	8,775,040	11,773	405,904	327,252	5,431,071	536,914	6,701,141
Wimmera ..	7,394,560	6,128	1,950,457	7,260	3,609,988	628,843	6,196,548
Mallee ..	10,784,000	8,267	3,333,244	11,479	2,270,812	581,798	6,197,333
Northern ..	6,337,280	11,972	1,444,125	140,013	3,735,621	59,847	5,379,606
North-Eastern ..	7,220,480	5,160	143,250	9,836	3,779,875	428,746	4,361,507
Gippsland ..	8,739,200	8,680	183,741	373,925	2,577,442	1,377,560	4,512,668
Total ..	56,245,760	74,161	8,061,920	1,141,157	25,246,821	3,888,421	38,338,319
PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.							
Central ..	..	..	16' 72	8' 51	66' 65	8' 12	100' 00
North-Central ..	..	..	6' 24	1' 62	89' 89	2' 25	100' 00
Western ..	..	..	6' 06	4' 88	81' 05	8' 01	100' 00
Wimmera ..	..	..	31' 48	0' 11	58' 26	10' 15	100' 00
Mallee ..	..	..	53' 78	0' 19	36' 64	9' 39	100' 00
Northern ..	..	..	26' 85	2' 60	69' 44	1' 11	100' 00
North-Eastern ..	..	..	3' 28	0' 23	86' 66	9' 83	100' 00
Gippsland ..	..	..	4' 07	8' 29	57' 11	30' 53	100' 00
Total ..	..	..	21' 03	2' 98	65' 85	10' 14	100' 00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.							
Central ..	..	22' 63	5' 73	20' 62	7' 30	5' 77	7' 21
North-Central ..	..	7' 28	1' 72	3' 16	7' 92	1' 29	5' 80
Western ..	..	15' 87	5' 03	28' 68	21' 51	13' 81	17' 48
Wimmera ..	..	8' 26	24' 20	0' 63	14' 30	16' 17	16' 17
Mallee ..	..	11' 15	41' 35	1' 01	8' 99	14' 96	16' 17
Northern ..	..	16' 14	17' 91	12' 27	14' 80	1' 54	14' 03
North-Eastern ..	..	6' 96	1' 78	0' 86	14' 97	11' 03	11' 37
Gippsland ..	..	11' 71	2' 28	32' 77	10' 21	35' 43	11' 77
Total ..	..	100' 00	100' 00	100' 00	100' 00	100' 00	100' 00

It will be seen from these tables that the largest areas under cultivation and the largest proportions of cultivation to land occupied are found in the Mallee, Wimmera, and Northern districts. Of the occupied

land, 54 per cent. in the Mallee, 31 per cent. in the Wimmera, and 27 per cent. in the Northern districts are devoted to agriculture, and these divisions supply over 83 per cent. of the cultivation in Victoria. In the North-Central, Western, and North-Eastern districts the land occupied is largely devoted to grazing; in Gippsland considerable attention is given to the cultivation of grasses, 33 per cent. of all the sown grasses in the State being found in that district.

Areas occupied and stock thereon, in districts. The next table contains particulars of the distribution of horses, cattle, and sheep on agricultural and pastoral lands in March, 1930:—

AREA OCCUPIED AND STOCK THEREON, 1930.

Districts.	Area Occupied for—		Number of—		
	Agriculture.	Pasture.	Horses.	Cattle.	Sheep.
	acres.	acres.			
Central ..	462,331	2,073,089	77,877	228,519	1,799,794
North-Central ..	138,868	2,035,515	19,382	73,030	1,622,538
Western ..	405,904	5,758,323	52,619	323,890	5,314,595
Wimmera ..	1,950,457	3,617,248	51,337	29,827	2,267,927
Mallee ..	3,333,244	2,282,291	55,733	26,767	718,651
Northern ..	1,444,125	3,875,634	74,625	156,006	2,771,067
North-Eastern ..	143,250	3,789,511	27,103	201,312	1,521,423
Gippsland ..	183,741	2,951,367	34,339	295,891	1,411,208
Total ..	8,061,920	26,387,978	393,015	1,335,242	17,427,203

The area occupied does not include 3,888,421 acres which are mostly in an unproductive state.

Live stock in Victoria, 1926 to 1930. The following return shows the live stock in Victoria in each of the last five years:—

LIVE STOCK IN VICTORIA, 1926 to 1930.

Live Stock.	1926.	1927.	1928.	1929.	1930.
Horses (including foals)	463,051	447,988	428,666	412,877	393,015
Cattle—					
Dairy Cows ..	727,940	673,089	626,139	615,092	619,416
Other (including calves) ..	785,847	762,672	700,938	689,334	715,826
Sheep ..	13,740,500	14,919,653	15,557,067	16,498,222	17,427,203
Pigs ..	339,601	284,271	212,785	222,084	265,978

Comparing 1930 with 1929, sheep increased by 5·6 per cent. and cattle by 2·4 per cent., while horses decreased by 4·8 per cent.

The peak period for horses was 562,331 in 1914, since when, owing to the increased use of motor vehicles for transport and tractors on

farms, there has been a fairly constant decrease in the number each year. The decline in the last ten years amounted to 23 per cent.

The number of sheep in the State in 1930 established a record.

In the subjoined table will be found a statement of the average and the range of prices of live stock ruling in Melbourne during the years 1928-29 and 1929-30. The information has been extracted from the *Melbourne Stock and Station Journal*:—

PRICES IN MELBOURNE OF LIVE STOCK,
1928-29 AND 1929-30.

Stock.	Prices in 1928-29.			Prices in 1929-30.		
	Average.	Range.		Average.	Range.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<i>Horses.</i>						
Extra heavy draught ..	42 16 6	39 10 0 to	47 10 0	37 16 0	35 0 0 to	40 10 0
Medium draught ..	29 15 0	27 10 0 to	31 10 0	27 1 0	24 10 0 to	29 10 0
Delivery cart ..	16 17 6	15 0 0 to	19 10 0	15 4 0	14 0 0 to	17 10 0
Indian Remounts ..	15 14 0	12 0 0 to	17 5 0	16 14 0	15 0 0 to	18 10 0
Saddle and harness ..	8 3 6	7 0 0 to	11 5 0	7 9 0	6 10 0 to	9 0 0
Ponies ..	9 18 6	9 0 0 to	11 10 0	8 16 0	7 10 0 to	10 10 0
Order cart ..	11 12 6	10 0 0 to	13 10 0	12 7 6	12 0 0 to	13 10 0
<i>Fat Cattle.</i>						
<i>Bullocks—</i>						
Extra prime ..	19 14 10	17 2 2 to	25 16 0	24 4 0	20 6 0 to	28 7 0
Prime ..	17 9 2	15 4 0 to	21 15 0	21 10 0	19 5 0 to	25 0 0
Good ..	15 8 1	13 7 6 to	19 10 0	18 13 0	15 3 0 to	21 3 0
Good light and handy weights	14 5 6	11 7 6 to	17 17 0	16 17 0	13 15 0 to	19 0 0
<i>Cows—</i>						
Best ..	12 18 8	11 0 9 to	15 11 0	15 5 0	13 12 0 to	16 12 6
Others ..	9 15 8	8 17 6 to	10 15 0	9 15 0	8 16 0 to	10 16 6
<i>Fat Sheep.</i>						
<i>Wethers (cross)—</i>						
Extra prime ..	1 12 4	1 3 7 to	1 19 9	1 7 1	1 3 2 to	1 15 11
Prime ..	1 9 4	1 1 5 to	1 16 5	1 4 0	1 0 5 to	1 12 1
Good ..	1 6 1	0 18 0 to	1 13 0	1 0 7	0 17 9 to	1 7 11
<i>Ewes (cross)—</i>						
Extra prime ..	1 5 8	0 16 6 to	1 14 0	1 0 6	0 17 2 to	1 8 4
Prime ..	1 2 11	0 14 9 to	1 11 6	0 17 9	0 14 4 to	1 4 6
Good ..	0 19 1	0 12 0 to	1 8 0	0 12 11	0 9 8 to	0 17 8
<i>Wethers (merino)—</i>						
Extra prime ..	1 11 1	1 2 6 to	2 0 4	1 4 9	0 18 4 to	1 14 8
Prime ..	1 7 6	1 0 4 to	1 17 3	1 0 11	0 16 0 to	1 11 1
Good ..	1 3 8	0 16 10 to	1 13 0	0 17 9	0 14 6 to	1 7 3
<i>Fat Lambs.</i>						
Extra prime ..	1 6 9	0 19 10 to	1 13 2	1 4 2	1 1 10 to	1 7 3
Prime ..	1 4 3	0 17 9 to	1 11 0	1 1 0	0 19 4 to	1 3 10
Good ..	1 1 2	0 14 6 to	1 7 5	0 17 6	0 15 10 to	1 1 0
<i>Pigs.</i>						
<i>Back Fattens—</i>						
Extra heavy prime	13 12 4	10 16 3 to	16 9 4	12 11 6	9 13 0 to	14 10 6
Extra prime and weighty	10 10 7	8 17 6 to	12 10 0	8 5 9	6 11 3 to	10 3 0
<i>Baconers—</i>						
Extra prime ..	5 11 3	5 1 4 to	6 1 10	4 14 5	3 18 2 to	5 11 6
Prime ..	5 1 8	4 10 0 to	5 13 1	4 3 9	3 10 3 to	4 17 9
Porkers ..	3 0 10	2 15 11 to	3 8 3	2 12 5	2 1 11 to	3 1 6

NOTE.—Prices for dairy cattle are not available.

The following is a statement of the stock slaughtered on farms and stations, as well as in municipal abattoirs, during the last three years.

STOCK SLAUGHTERED. 1927-28 TO 1929-30.

Year ended June—	Number Slaughtered.		
	Sheep and Lambs.	Cattle.	Pigs.
1928	4,732,494	469,610	358,135
1929	5,286,642	466,576	354,339
1930	6,024,702	337,662	347,688

The purposes for which the slaughtered animals were used were as follows :—

PURPOSES FOR WHICH STOCK WERE SLAUGHTERED, 1927-28 TO 1929-30.

Year ended June—	For Butcher and Private Use.*			For Export.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1928	3,800,938	460,668	147,224	915,545	4,877	81
1929	3,631,251	456,829	156,049	1,590,573	6,297	..
1930	4,162,987	381,743	128,557	1,825,019	1,946	81

Year ended June—	For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1928	2,830	2,353	210,547	13,181	1,712	283
1929	6,470	1,298	198,131	8,348	2,152	159
1930	9,931	126	218,799	26,765	3,847	251

* Including carcasses held in Cool Stores at end of year.

Of the 6,024,702 sheep and lambs slaughtered in Victoria in 1929-30, 1,825,019, or 30 per cent., as compared with 30 per cent. in 1928-29 and with 19 per cent. in 1927-28, were frozen. In 1929-30 the oversea exports included 13,666,929 lbs. of mutton, valued at £248,021, and 47,238,316 lbs. of lamb, valued at £1,279,836.

The importance of the mutton and lamb export trade to Victorian sheep owners is evidenced by the figures in the appended statement showing the particulars of exports in each of the last ten years. The quantities exported in 1920-21 were below the average, owing to the dry condition which had prevailed in the previous year. After a world-wide fall in values, the

**Frozen Mutton
and Lamb
Exported.**

season 1922-23 was marked by exceptionally heavy exports of both mutton and lamb at improved prices. In the 1923-24 season the export of mutton practically ceased, while the number of lambs exported was only about 40 per cent. of that for the previous year. The abnormal activity in 1922-23 was, to some extent, responsible for the great reduction in exports in 1923-24. Seasonal influences were responsible for fluctuations in the subsequent years.

FROZEN MUTTON AND LAMB EXPORTED.

Year ended June—	Carcasses Exported.					
	Mutton.			Lamb.		
	Number.	Average Weight.	Value.	Number.	Average Weight.	Value.
		lbs.	£		lbs.	£
1921.. ..	372,916	44	362,296	413,170	32	483,359
1922.. ..	314,564	49	306,199	872,140	33	751,077
1923.. ..	989,456	44	880,472	1,668,059	30	1,493,156
1924.. ..	12,945	43	13,757	678,685	32	656,438
1925.. ..	87,767	51	95,022	948,032	31	905,743
1926.. ..	171,803	47	145,261	1,309,021	33	1,263,511
1927.. ..	149,358	49	141,998	1,197,067	33	1,053,502
1928.. ..	137,484	44	117,200	778,061	28	639,486
1929.. ..	422,215	50	431,440	1,168,358	32	1,096,891
1930.. ..	309,903	44	248,021	1,515,116	31	1,279,836

Dairying. The dairying industry is one of the principal sources of the wealth of the community. The value of dairy produce in 1930 was £10,923,180, as compared with £11,959,500 in 1929, £11,186,070 in 1928, £10,483,760 in 1927, and £10,364,790 in 1926. The following table shows the numbers of cowkeepers and cows at the end of, and the total production of butter and cheese, in each of the last five years :—

DAIRYING, 1925-26 to 1929-30.

Year ended March—	Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
			lbs.	lbs.
1926	58,933	727,940	81,747,291	5,279,009
1927	56,935	673,089	81,935,815	5,997,648
1928	55,356	626,139	84,270,812	5,621,945
1929	54,814	615,092	93,728,516	5,505,932
1930	54,131	619,416	90,639,652	6,953,949

* Year ended 30th June.

Areas of holdings and numbers and sizes of dairy herds.

Information relating to the classification of sizes of dairy herds on various holdings appears in the 1928-29 issue of this work, page 581.

Butter and cheese made on farms.

The quantities of butter and cheese made on farms in the last five years were as follows:—

BUTTER AND CHEESE MADE ON FARMS, 1925-26 TO 1929-30.

Year ended June—					Butter.	Cheese.
					lbs.	lbs.
1926	..	..	..	..	4,734,669	389,893
1927	..	..	..	..	3,887,324	516,063
1928	..	..	..	..	3,592,264	217,495
1929	..	..	..	..	3,464,539	246,854
1930	..	..	..	..	3,469,804	206,055

Butter and cheese made in factories.

The quantities of butter, cheese, and concentrated, condensed, and powdered milk, casein, and milk sugar made, and of cream sold, in factories during the last five years were as follows:—

BUTTER, CHEESE, ETC., MADE IN FACTORIES, 1925-26 TO 1929-30.

Year ended June—	Butter made.	Cream sold.	Cheese made.	Concentrated, Condensed, and Powdered Milk made.	Casein made.	Milk Sugar made.
	lbs.	gallons.	lbs.	lbs.	lbs.	lbs.
1926	77,012,622	388,235	4,889,116	43,646,852	1,503,369	152,783
1927	78,108,491	344,605	5,481,585	48,186,040	1,803,049	350,570
1928	80,678,548	381,794	5,404,450	53,876,662	2,619,855	213,119
1929	90,263,977	471,729	5,259,078	53,948,559	3,340,171	310,426
1930	87,169,848	496,628	6,747,894	51,581,802	2,568,956	234,490

The quantities of milk, in gallons, received at factories and creameries were 197,804,300 in 1925-26, 205,441,560 in 1926-27, 212,983,200 in 1927-28, 226,228,350 in 1928-29, and 220,977,700 in 1929-30.

Exports of butter and cheese.

In 1929-30 there were exported from Victoria to countries outside Australia 40,305,160 lbs. of butter, valued at £2,668,755, all of which was Australian produce. The quantity sent to the United Kingdom was 31,042,702 lbs., valued at £2,041,829. The quantity of cheese exported to oversea countries was 69,671 lbs., and the value thereof, £5,172.

Information relating to the wool clip is obtained direct from the growers, and an allowance is made for the wool on Victorian skins, both stripped and exported. On this basis the production of wool in 1929-30 and earlier seasons was as follows:—

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION.

Districts.		Wool Clip, 1929-30.			
		Sheep.	Lambs.	Total.	
		lbs.	lbs.	lbs.	
Central	..	9,271,230	766,432	10,037,662	
North-Central	..	10,225,710	747,777	10,973,487	
Western	..	34,085,618	2,578,967	36,664,585	
Wimmera	..	16,570,673	1,133,011	17,703,684	
Mallee	..	6,231,729	314,486	6,546,215	
Northern	..	17,880,327	1,650,909	19,531,236	
North-Eastern	..	8,020,653	722,761	8,743,414	
Gippsland	..	7,032,484	563,122	7,595,606	
Total Clip	{	1929-30	109,318,424	8,477,465	117,795,889
		1928-29	116,076,806	8,292,541	124,369,347
		1927-28	89,113,548	5,920,098	95,033,646
		1926-27	92,043,642	6,133,520	98,177,162
		1925-26	84,101,370	6,512,929	90,614,299
—		1926-27.	1927-28.	1928-29.	1929-30.
		lbs.	lbs.	lbs.	lbs.
Wool clip	..	98,177,162	95,033,646	124,369,347	117,795,889
Wool stripped from Victorian skins and on Victorian skins exported (estimated)	..	23,122,459	23,769,390	25,509,241	28,261,000
Total production	..	121,299,621	118,803,036	149,878,588	146,056,889
Total value	..	£7,876,683	£9,701,660	£10,252,002	£5,694,019

Of the total quantity of wool produced, the amounts used in manufacturing for each of the last five years were as follows:—1925-26, 22,967,529 lbs.; 1926-27, 31,205,206 lbs.; 1927-28, 25,346,066 lbs.; 1928-29, 25,008,506 lbs.; and 1929-30, 26,008,800 lbs. The quantity used in manufacturing represented 20·6 per cent. of the total production in 1925-26, 25·7 per cent. in 1926-27, 21·3 per cent. in 1927-28, 16·7 per cent. in 1928-29, and 17·8 per cent. in 1929-30.

Sheep shorn. In 1929-30 there were 14,204,743 sheep and 3,620,557 lambs shorn, as compared with 13,005,239 sheep and 3,565,737 lambs in 1928-29, 12,809,537 sheep and 2,747,400 lambs in 1927-28, 11,863,262 sheep and 2,671,435 lambs in 1926-27, 10,990,842 sheep and 2,899,787 lambs in 1925-26.

Weight of
a fleece.

The next table shows the production of wool per sheep and per lamb shorn in each of the last five years :—

WEIGHT OF A FLEECE, 1925-26 to 1929-30.

Year.	Weight of a Fleece.		
	Sheep.	Lambs.	Sheep and Lambs combined.
	lbs.	lbs.	lbs.
1925-26	7·65	2·25	6·52
1926-27	7·76	2·30	6·75
1927-28	6·96	2·15	6·11
1928-29	8·93	2·33	7·51
1929-30	7·70	2·34	6·61

Prices of
wool.

The following information as to the average prices of wool per lb. which have prevailed during the last three seasons has been obtained from Melbourne wool brokers :—

PRICES OF WOOL, 1927-28 to 1929-30.

Class of Wool.	Average Price per lb. in—		
	1927-28.	1928-29.	1929-30.
GREASY MERINO.			
Extra Super (Western District)	35d. to 37d.	29d. to 32d.	19d. to 21d.
Super	32d. to 34d.	26d. to 28d.	16d. to 18d.
Good	26d. to 28d.	23d. to 25d.	14d. to 15d.
Average	22d. to 24d.	20d. to 23d.	12d. to 13d.
Wasty and Inferior	18d. to 20d.	13d. to 15d.	8d. to 9d.
Extra Super Lambs	36d. to 40d.	30d. to 34d.	20d. to 22d.
Super Lambs	29d. to 31d.	24d. to 28d.	15d. to 17d.
Good Lambs	22d. to 24d.	17d. to 20d.	11d. to 13d.
Average Lambs	18d. to 20d.	10d. to 16d.	6d. to 10d.
Inferior Lambs	11d. to 12d.	8d. to 10d.	4d. to 6d.
GREASY CROSSBRED.			
Extra Super Comebacks	31d. to 33d.	26d. to 29d.	16d. to 19d.
Super Comebacks	28d. to 30d.	23d. to 25d.	14d. to 15d.
Fine Crossbred	25d. to 26d.	20d. to 22d.	12d. to 14d.
Medium Crossbred	18d. to 20d.	15d. to 18d.	9d. to 11d.
Coarse Crossbred and Lincoln	13d. to 16d.	10d. to 13d.	6d. to 8d.
Super Fine Crossbred Lambs	26d. to 30d.	24d. to 26d.	15d. to 17d.
Good Crossbred Lambs	20d. to 22d.	18d. to 20d.	11d. to 12d.
Coarse and Lincoln Lambs	15d. to 17d.	13d. to 15d.	8d. to 9d.

PRICES OF WOOL, 1927-28 TO 1929-30—continued.

Class of Wool.	Average Price per lb. in—		
	1927-28.	1928-29.	1929-30.
SCOURED.			
Extra Super Fleece	46d. to 48d.	40d. to 44d.	24d. to 26d.
Super Fleece	40d. to 44d.	36d. to 40d.	22d. to 24d.
Good Fleece	36d. to 38d.	30d. to 34d.	18d. to 19d.
Average Fleece	30d. to 32d.	25d. to 28d.	15d. to 17d.
RECORD PRICES FOR THE SEASON.			
Greasy Merino Fleece	44½d.	47d.	37½d.
„ Comeback Fleece	34½d.	30½d.	21d.
„ Merino Lambs	51½d.	37½d.	24½d.
„ Comeback Lambs	39½d.	30d.	22d.
Scoured Fleece	51½d.	48d.	35½d.

Tables containing information relating to the numbers of flocks in districts, the sizes of flocks, and the number and sizes of flocks on various holdings, will be found on pages 586 to 588 of the 1928-29 *Year-Book*.

In the following statement are given the numbers of horses, cattle, sheep and pigs in the various Australian States and New Zealand, according to the latest available figures:—

LIVE STOCK IN AUSTRALASIA.

State, &c.	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other.		
Victoria	393,015	619,416	715,826	17,427,203	265,978
New South Wales ..	534,945	1,023,187	1,761,428	49,870,000	323,499
Federal Capital Territory	929	4,760		240,445	124
Queensland	500,104	680,577	4,528,011	20,324,303	236,037
South Australia	189,054	104,255	100,261	6,186,252	74,906
Northern Territory	33,703	711,607		11,803	359
Western Australia ..	159,528	74,223	762,423	9,556,823	64,522
Tasmania	34,336	72,235	142,408	2,091,113	52,899
New Zealand	297,195	1,440,321	2,325,347	30,841,287	487,793

Bee-keeping. The returns for 1929-30 show that there were in that year 2,394 bee-keepers, who owned 53,585 frame and 5,130 box hives, producing 3,043,835 and 53,970 lbs. of honey respectively, and 29,682 lbs. of beeswax. The number of bee-keepers owning 20 hives and upwards was 558, as compared with 569 in the previous season. In 1929-30, the quantity of honey produced in the Wimmera district was 1,536,345 lbs., in the Western district, 413,587 lbs., in the North-Eastern district, 330,117 lbs., and in the Northern district, 316,111 lbs. The more important particulars of the industry for the last five years are given below:—

BEE-KEEPING, 1925-26 to 1929-30.

Season ended May—			Number of Bee-keepers.	Number of Hives.	Honey produced.	Beeswax produced.
					lbs.	lbs.
1926	..	..	3,799	66,192	2,114,807	28,812
1927	..	..	2,968	54,123	2,370,310	33,238
1928	..	..	2,521	52,748	2,992,860	34,358
1929	..	..	2,284	55,247	4,181,571	49,675
1930	..	..	2,394	58,715	3,097,805	29,682

**State
expenditure
on rabbit
destruction.**

Active operations for the destruction of rabbits, &c., on Crown lands were first undertaken by the Government in 1830, and from that date to 30th June, 1930, sums amounting to £1,554,864 had been expended in connexion therewith, including subsidies to Shire Councils for the destruction of wild animals. The following are the amounts spent since 1879:—

EXPENDITURE ON DESTRUCTION OF RABBITS, ETC.

	£		£
1879-80 to 1888-89	.. 142,963	1923-24	85,489
1889-90 to 1898-99	.. 208,638	1924-25	84,368
1899-1900 to 1908-09	.. 170,050	1925-26	88,874
1909-10 to 1918-19	.. 283,693	1926-27	91,929
1919-20 .. ..	.. 36,672	1927-28	85,200
1920-21 .. ..	.. 36,158	1928-29	81,377
1921-22 .. ..	.. 40,766	1929-30	71,277
1922-23 .. ..	.. 47,410		

In addition to the expenditure of £1,554,864 referred to above, sums have frequently been advanced from Loan Funds for the purchase of wire netting for supply to municipalities and land owners. The amounts of these advances in the last five years were as follows:—£42,628 in 1925-26, £32,338 in 1926-27, £37,887 in 1927-28, £55,198 in

1928-29, and £20,538 in 1929-30. A complete system, administered by an officer called the Chief Inspector under the Vermin Destruction Act, exists for effectually keeping the rabbits under control.

Rabbits, &c., sold at Melbourne Fish Market. The quantity of rabbits, hares, and wild-fowl sold at the Melbourne Fish Market in each of the last five years was as shown in the following statement :—

RABBITS, HARES, AND WILD-FOWL SOLD AT THE MELBOURNE FISH MARKET, 1925-26 to 1929-30.

Year ended June—				Rabbits.	Hares.	Wild-fowl.
				pairs.	brace.	brace.
1926	..	..	..	1,916,460	783	14,784
1927	..	..	..	1,640,028	78	20,406
1928	..	..	..	1,697,316	*	9,054
1929	..	..	..	1,594,020	Nil	11,316
1930	..	..	..	1,347,168	Nil	7,422

* Included with rabbits.

Frozen rabbits, &c., exported. Large quantities of frozen rabbits and hares and of rabbit and hare skins have been exported to oversea countries, the numbers and values for each of the last five years being as follows :—

RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA, 1925-26 to 1929-30.

Year ended June—				Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
				Quantity.	Value.	Quantity.	Value.
				pairs.	£	lbs.	£
1926	..	..		456,849	53,423	3,513,046	579,000
1927	..	..		403,147	44,999	2,211,153	381,334
1928	..	..		527,988	44,563	2,896,685	549,802
1929	..	..		1,624,279	136,273	2,682,567	604,842
1930	..	..		1,474,898	123,492	2,604,601	441,074

FISHERIES.

The numbers of men and boats engaged in the fishing industry at the different fishing stations throughout the State are given in the following table for the year 1929-30:—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED,
1929-30.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet	7	5	260	130
Apollo Bay	3	2	175	42
Barwon Heads and Ocean Grove	7	4	900	70
Brighton	11	7	483	74
Corner Inlet, Welshpool, Toora, and Port Franklin	77	64	8,867	3,366
Dromana and Rosebud	28	20	1,323	336
Frankston	14	10	233	309
Geelong	107	55	4,766	1,043
Gippsland Lakes	183	126	10,457	4,871
Kerang	5	5	31	125
Lake Boga	2	2	8	8
Lorne	8	5	231	122
Mallacoota	9	9	725	177
Mentone	13	10	157	150
Mordialloc, Chelsea, and Carrum	100	58	3,254	1,942
Mornington	61	37	3,531	993
Portarlington and St. Leonards	77	53	5,467	1,394
Portland	37	24	4,364	488
Port Albert	87	52	4,533	1,653
Port Campbell	2	2	136	19
Port Fairy	45	31	8,290	423
Port Melbourne	46	41	3,693	2,331
Queenscliff	140	73	16,533	1,879
Sandringham and Black Rock	41	28	5,016	577
Sorrento, Portsea, and Rye	81	47	5,225	1,028
St. Kilda	29	15	330	287
Torquay	8	7	195	74
Warrnambool	8	6	502	81
Werribee	8	6	338	102
Waranga Basin	19	17	197	73
Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin)	129	106	14,348	4,441
Williamstown and Altona	45	32	1,990	574
Wonthaggi	4	4	150	38
Total	1,441	963	106,708	29,225

Melbourne Fish Market. The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1928-29 and 1929-30 were as shown in the next table:—

FISH SOLD IN THE MELBOURNE FISH MARKET.
1928-29 AND 1929-30.

		1928-29.		1929-30.	
		Quantity.	Value.	Quantity.	Value.
			£		£
Fresh Fish (Victorian)	lbs.	9,299,065	147,235	10,962,450	159,869
Crayfish ..	doz.	28,402	29,822	35,919	31,392
Imported Fish (fresh or frozen)	.. lbs.	5,400,508	180,017	5,719,976	148,149
Oysters ..	.. bags	9,757	29,271	9,733	24,332
Total ..	..	..	386,345	..	363,742

In addition to the above, 756 cwt. of smoked fish, and 67,770 lbs. of prawns were sold in this market in 1929-30.

Victorian fish sold. The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1929-30 were as follows:—

VICTORIAN FISH SOLD IN 1929-30.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lbs.	doz.	£	£
Melbourne ..	10,962,450	9,346	159,869	7,477
Ballarat ..	504,705	1,147	7,360	918
Other ..	2,994,201	5,089	43,666	4,071
Total ..	14,461,356	15,582	210,895	12,466

Fish imported. In connexion with this subject, the quantities and values of the different classes of fish imported are of interest. Particulars of imports from oversea countries in each of the last two years are given in the following statement:—

FISH IMPORTED, 1928-29 AND 1929-30.

		1928-29.		1929-30.	
		Quantity.	Value.	Quantity.	Value.
Fish—			£		£
Fresh or Frozen ..	.. lbs.	3,027,821	79,153	2,663,235	67,788
Smoked or Dried (not Salted) ..	..	28,141	2,022	34,877	2,041
Oysters in the Shell ..	.. cwt.	1,308	958	508	420
Potted or Concentrated, &c. ..	..	..	22,925	..	25,997
Preserved in tins, &c. ..	.. lbs.	6,870,852	307,896	6,993,170	335,774
N.E.I. ..	.. cwt.	2,484	7,012	2,155	6,274
Total ..	..	..	419,966	..	438,294

Of the 1929-30 oversea imports of fish preserved in tins, 3,847,692 lbs. came from Canada, 1,097,303 lbs. from the United Kingdom, 771,136 lbs. from Norway, and 658,278 lbs. from the United States of America.

The figures relating to agriculture and live stock in Victoria and Great Britain (England, Wales, and Scotland) in 1929 are, for comparative purposes, placed side by side in the table which follows:—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1929.

—				Victoria.	Great Britain.
Area	..	..	acres	56,245,760	56,208,959
Wheat	..	..	bushels	25,412,587	47,304,000
Oats	..	..	..	5,058,541	124,451,000
Barley	..	..	..	2,183,325	44,544,000
Peas	..	..	..	193,640	2,248,000
Potatoes	..	..	tons	171,747	4,743,000
Turnips and swedes	..	..	..	1,798*	14,909,000
Mangolds	..	..	..	5,539	5,712,000
Hay	..	..	..	963,039	6,286,000
Horses	..	..	No	393,015	1,160,278
Cattle	..	..	..	1,335,242	7,190,539
Sheep	..	..	..	17,427,203	23,660,973
Pigs	..	..	..	265,978	2,508,766

* Includes beet, carrots, and parsnips.

MINING.

The supervision of mining and the inspection of mines are regulated by Act of Parliament. Authority for all mining operations, whether on Crown or private lands, must be obtained in the prescribed manner, and mining leases giving the right to enter on private land for mining purposes may be issued to another than the owner.

The taking out of a "miner's right" entitles the holder to prospect for gold on Crown lands. The right may be had on payment of a sum of 2s. 6d. per annum and remains in force for any number of years not exceeding fifteen. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands, which is called a "claim." The revenue in 1929-30 from miners' rights was £2,062.

Leases for the purpose of mining for gold are granted for a term not exceeding fifteen years at a yearly rental of 2s. 6d. per acre. For mining leases of land to be worked by means of dredging or hydraulic sluicing the yearly rent is 5s. per acre. Other mineral and coal mining leases are also issued at varying rates. The revenue from these sources in 1929-30 was £5,099.

The area of Crown and private lands under occupation for mining purposes on 31st December, 1930, was 57,807 acres. The subjoined table shows the area being worked for different minerals:—

Area
occupied for
Mining.

AREA UNDER OCCUPATION FOR MINING PURPOSES,
31st DECEMBER, 1929 (CROWN LAND AND PRIVATE LAND).

Nature of Mineral, &c.						Area.
						acres.
Gold	..	..	..	..	..	6,830
Coal (ordinary)	..	..	..	..	..	11,537
Coal (brown)	..	..	..	..	..	727
Coal (black and brown)	..	..	..	..	..	100
Bauxite	..	..	..	..	..	86
Bauxite and Aluminium	..	..	..	..	..	17
Bluestone	..	..	..	..	..	27
Clay	..	..	..	..	..	32
Clay (Aluminium)	..	..	..	..	..	6
Clay and Chalk	..	..	..	..	..	6
Clay and Schist	..	..	..	..	..	4
Clay and Slate	..	..	..	..	..	3
Clay, Pigments and Infusorial Earth	..	..	..	..	..	9
Copper	..	..	..	..	..	195
Dolomite and Clay	..	..	..	..	..	1
Fireclay	..	..	..	..	..	18
Granite	..	..	..	..	..	22
Gravel (Cement)	..	..	..	..	..	6
Gypsum	..	..	..	..	..	461
Kaolin	..	..	..	..	..	22
Kaolin and Gold	..	..	..	..	..	20
Kaolin and Quartz Grit	..	..	..	..	..	10
Lead	..	..	..	..	..	29
Limestone	..	..	..	..	..	85
Limestone and Clay	..	..	..	..	..	27
Magnesite	..	..	..	..	..	114
Manganese and Cobalt	..	..	..	..	..	19
Marble	..	..	..	..	..	20
Marblestone	..	..	..	..	..	6
Molybdenite	..	..	..	..	..	151
Ochre	..	..	..	..	..	5
Ochres, Chalks and Gold	..	..	..	..	..	5
Oil	..	..	..	..	..	2,454
Oil and Gas	..	..	..	..	..	30,467
Oil and Gypsum	..	..	..	..	..	6
Oil, Gas and Bitumen	..	..	..	..	..	436
Quicksilver	..	..	..	..	..	61
Sand	..	..	..	..	..	50
Silicate of Alumina	..	..	..	..	..	51
Silver and Lead	..	..	..	..	..	10
Tin	..	..	..	..	..	2,926
Tin and Gold	..	..	..	..	..	93
Iron	..	..	..	..	..	60
Water Right Licences	..	..	..	..	..	406
Tailings Licences	..	..	..	..	..	157
Total	..	..	..	..	..	57,807

* Includes State Coal Mine area.

Certain Gold Mining Leases include the right to mine for Minerals.
Certain Mineral Leases include the right to mine for Gold.

The mining industry has been well fostered by the Mining development. Government, not only in the way of financial assistance but also by means of geological surveys and boring. Apart from the annual expenditure of the Mines Department from consolidated revenue, of which a statement is appended, portions of surplus revenues of past years amounting to £85,000 had been expended or advanced for developmental purposes from 1st July, 1899, to 30th June, 1930. Since 1st July, 1899, £520,421 has been apportioned from loan receipts and expended on mining development; but, apart from £249,399 expended on the State Coal Mine during the years 1909 to 1925, no loan money has been allotted for development for 24 years.

STATE EXPENDITURE ON MINING, 1925-26 to 1929-30.

Item.	Expenditure from Consolidated Revenue.				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	£	£	£	£	£
Mines Department	23,569	25,687	24,900	23,649	23,182
State Coal Mine	471,530	605,218	621,316	729,820	688,253.
Coal Mines Regulation—Sinking Fund and Depreciation Fund	41,807	54,555	73,567	41,847	130,279
Diamond drills for prospecting ..	12,242	12,864	13,323	15,519	9,955.
Testing plants	3,120	2,378	2,980	3,372	3,443
Geological and underground surveys of mines	3,595	3,791	3,973	3,917	3,567.
Mining Development—					
Advances to companies, &c., boring for gold, coal, &c. ..	12,368	10,678	5,309	3,029	4,753.
Miscellaneous	2,143	2,065	1,708	1,786	1,943.
Total	570,374	717,236	747,076	822,939	865,375

The advances from loan moneys and revenue to mining companies to 30th June, 1930, for the development of mining, totalled £285,705 (£62,740 from loan moneys, and £222,965 from revenue) of which sum £43,753 had up to that date been repaid. £53,604 realized, and £165,585 written off, leaving £22,763 outstanding. Interest received during 1929-30 amounted to £51, and interest outstanding on 30th June, 1930, to £3,955.

The mineral production of the State (excluding salt) is summarized in the subjoined statement, which contains particulars of the recorded production of all metals and minerals up to the end of the year 1929 :—

TOTAL MINERAL PRODUCTION TO 31st DECEMBER, 1929.

Metals and Minerals.	Recorded during 1929.		Total Recorded to end of 1929.	
	Quantity.	Value.	Quantity.	Value.
	Fine ozs.	£	Fine ozs.	£
Gold	26,275	111,609	71,324,805	302,967,801
Silver.. .. .	909*	100	1,467,642*	223,039
Platinum .. .. .	..	..	30,577	7,880
Diamonds .. .. .	..	..	311	1,671
Sapphires, &c. .. ..	..	..	..	128
	tons.	..	..	630
Coal, black	703,828	813,370	13,896,700	10,834,983
" brown	1,741,176	178,052	7,501,240	1,253,039
Ore—copper	10	30	18,740	218,620
" tin	25½	3,545	17,097½	977,641
" antimony	2	23	104,276½	612,078
" silver-lead .. .. .	..	..	804	5,992
" iron .. .. .	..	..	5,434	12,540
" manganese .. .. .	..	..	422	2,009
Wolfram .. .. .	..	..	118	11,785
Gypsum	13,195	6,000	146,062	99,288
Magnesite	27	101	1,983	6,073
Kaolin	1,717	2,330	37,178	48,771
Diatomaceous earth .. .. .	..	..	8,657	33,137
Pigment clays .. .. .	..	..	4,496	5,503
Phosphate rock .. .. .	..	..	15,781	16,704
Molybdenite .. .. .	..	..	868½	30,911
Fluorspar .. .. .	..	..	623	1,888
Jarosite (Red Oxide) .. .. .	..	..	109	1,359
Bauxite	546	923	1,660	3,319
Bluestone, freestone, granite, &c.†	..	624,600	..	11,134,691
Limestone, &c.§	..	..	..	..
Total .. .. .	..	1,740,653	..	328,511,680

* Extracted from gold at the Melbourne Mint. + Concentrates. ‡ From 1866 only.
§ Record from 1900.

NOTE.—The value of gold as shown above is based on the average value of Victorian gold received at the Melbourne Mint.

Gold raised
in Victoria.

The quantities of gold raised in Victoria in different periods are shown in the next table:—

GOLD RAISED IN VICTORIA, 1851 to 1929.

Period.	Quantity * (Gross ozs.).	Period.	Quantity (Fine ozs.).
1851-60	23,334,263	1916-20	905,561
1861-70	16,276,566	1921-25	421,250
1871-80	10,156,297	1926	49,078
1881-90	7,103,448	1927	38,538
1891-1900 ..	7,476,038	1928	33,917
1901-10	7,095,061	1929	26,275
1911-15	2,161,349		

* Gross ozs. 1851-1900.

The yield has been on the down grade since 1906, the return for the State for 1929 having been the lowest since 1851. The quantities in fine ounces raised in the other principal gold-producing States in 1929 were 377,176 ounces in Western Australia, 9,476 ounces in Queensland, and 7,496 ounces in New South Wales. The total production of gold in the world in 1929, as shown in the United States Mint Report, was 19,496,721 fine ounces.

Mining
district
gold yields.

The yield of gold for the last two years in each mining district of the State, as estimated by the mining registrars, is shown in the following table. The quantities represented by the aggregate figures, which are given in gross ounces, were 21 ounces more than the total output in 1928, and 1 ounce more in 1929.

DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1928 AND 1929.

Mining District.	1928.			1929.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.	Ozs.
Ararat and Stawell ..	130	170	300	110	290	400
Ballarat	507	574	1,081	490	280	770
Beechworth	5,401	6,230	11,631	2,332	6,540	8,872
Bendigo	573	17,100	17,673	585	13,350	13,935
Castlemaine	1,416	3,710	5,126	1,150	1,740	2,890
Gippsland	344	479	823	400	765	1,165
Maryborough	306	340	646	400	350	750
Total	8,677	28,603	37,280	5,467	23,315	28,782

Dredging
and sluicing.

Particulars relating to the operations of dredging and sluicing plants for the last five years are as follows :—

DREDGING AND SLUICING, 1925 to 1929.

Year..				Number of Plants.	Area Worked.	Quantity of Material Treated.	Gold Obtained.	Tin Obtained.
					acres.	cub. yds.	ozs.	tons.
1925	..	..	..	19	22	1,332,600	7,184	69
1926	..	..	..	19	11	539,200	3,554	29
1927	..	..	..	9	28	900,500	4,440	44
1928	..	..	..	6	12	1,227,000	5,689	61
1929	..	..	..	6	6	682,400	1,774	14

The yield of gold in 1929 per cubic yard of material was 1.2 grains. Since the inception of dredge mining 1,902,998 ounces of gold and 1,796 tons of tin have been won by this system.

The quantity of tailings treated at old lode and alluvial mines by the cyanide process and the yield of gold therefrom are shown in the subjoined table for the last five years :—

Cyanidation.

CYANIDATION, 1925 to 1929.

Year.				Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Value of Yield.
					tons.	ozs.	£
1925	..	..	..	14	8,344	971	3,281
1926	..	..	..	7	7,748	1,323	5,028
1927	..	..	..	8	11,060	1,672	6,214
1928	..	..	..	8	6,397	1,199	4,240
1929	..	..	..	10	4,047	772	2,838

Records show that the total amount of tailings which have been treated by the cyanide and other processes is 16,032,135 tons, and that the gold which has been won thereby amounts to 1,286,695 ounces, which is equal to an average yield of 1 dwt. 15 grs. per ton.

Government Batteries. Batteries for testing small quantities of ore for prospectors have been erected by the Government in various mining districts. The number of these plants and their operations in the last five years were as follows:—

GOVERNMENT BATTERIES, 1925 TO 1929.

Year.					Number of Batteries.	Quantity of Ore Treated.	Yield of Gold.
						tons.	ozs.
1925	..	..	..	..	31	895	776
1926	..	..	..	..	31	476	618
1927	..	..	..	..	31	643	999
1928	..	..	..	..	31	1,369	1,405
1929	..	..	..	..	31	1,810	1,478

Since 1897, the year in which the first battery was erected, 79,389 tons of ore have been crushed for 56,743 ounces of gold.

Coal mining. Bituminous coal is found in three main areas in the southern portion of the State, viz., the Wannon, the Otway, and South Gippsland. The Wannon area is comparatively unprospected, owing to almost the whole of the land having been sold. In the Otway area bores have been sunk without disclosing seams of payable thickness. The South Gippsland area occupies about 2,000 square miles, and coal mining is being carried on at Wonthaggi, Kilcunda, Outtrim, Jumbunna, and Korumburra.

Brown coal. The brown coal beds of Victoria have an approximate area of 1,200 square miles, and are reputed to be the thickest known. At Morwell, 780 feet of coal were passed through in a bore 1,010 feet deep. It is estimated that the average thickness of the coal in the deposits at Morwell, Alberton, and Altona is 50 feet, and that the total deposits in the State amount to 11,000,000,000 tons. These deposits are practically untouched, as the total output of brown coal for all years has been only 7,501,240 tons, valued at £1,253,039, nearly all of which has been produced at the mines at Morwell and Yallourn under the control of the State Electricity Commission.

The State coal-field. The State Coal Mine at Wonthaggi, on the Powlett River, was opened in November, 1909. In June, 1911, the control of the mine was transferred to the Railways Commissioners. The area reserved for mining is about 17 square miles. Boring has proved that about 28,000,000 tons of coal existed in the central area of 5 square miles. The output of coal for the year ended 31st December, 1929, was 634,805 tons, valued at £730,026. The total output up to the end of 1929 was 9,297,805 tons, valued at £7,858,707. The average number of men employed at the mine throughout the year ended 31st December, 1929, was 1,615.

Victorian coal production and value. The quantity of coal, exclusive of brown coal, raised in Victoria up to the end of 1929 was 13,896,700 tons, valued at £10,834,983. The total quantity raised prior to 1892, the average annual production for different periods from 1892 to 1920, and the production for each of the years 1921 to 1929, together with the value per ton at the pit's mouth, are given in the following table :—

COAL PRODUCTION AND VALUE PER TON.

Period.				Average Annual Production.	Average Annual Value per ton at pit's mouth.
				tons.	s. d.
Prior to 1892	..	..	..	*77,914	18 8
1892-1900	..	..	..	184,517	9 11
1901-10	..	..	..	168,548	11 8
1911-15	..	..	..	608,512	9 2
1916-20	..	..	..	437,833	15 11
1921	..	..	..	514,859	23 5
1922	..	..	..	559,284	23 9
1923	..	..	..	476,823	22 0
1924	..	..	..	518,315	22 0
1925	..	..	..	534,246	22 4
1926	..	..	..	591,001	22 3
1927	..	..	..	684,245	22 4
1928	..	..	..	658,323	22 2
1929	..	..	..	703,828	23 1

* Total production up to date mentioned.

The quantities of coal produced in the other States in 1929 were as follows :—New South Wales, 7,617,736 tons; Queensland, 1,368,745 tons; Western Australia, 544,719 tons; and Tasmania, 130,291 tons.

Mining accidents. The numbers of fatal and non-fatal accidents in gold and coal mines during the last five years are shown below. Only those non-fatal accidents have been recorded which rendered the injured unfit for work for a period of at least fourteen days.

MINING ACCIDENTS, 1925 to 1929.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1925	2,353	1	6	2,593	5	20
1926	1,967	5	14	2,939	2	6
1927	1,126	1	1	2,492	4	7
1928	655	2	1	2,224	2	5
1929	864	2	..	2,251	2	8

As a result of gold mining accidents during the last five years 11 persons were killed, and 22 were injured and rendered unfit for work for a period of at least fourteen days. These numbers were equivalent to annual rates of 1·58 and 3·16 respectively per 1,000 employed. Coal mining accidents during the same period accounted for 15 deaths, and 46 injuries resulting in disablement for at least fourteen days, these being equal to yearly rates of 1·20 and 3·68 respectively per 1,000 employees.

The quantity and value of stone raised from Victorian Quarries. quarries during the last five years were as set forth in the following table:—

QUARRIES, 1925-26 to 1929-30.

Year ended June—	Number of Quarries.	Quantity of Stone Operated on—				Approximate Value of Stone Raised.
		Bluestone.	Sand-stone.	Granite.	Limestone.	
		c. yds.	c. yds.	tons.	c. yds.	£
1926 ..	127	1,650,461	6,000	5,377	300,708	587,910
1927 ..	116	1,941,739	8,368	6,848	308,095	700,200
1928 ..	108	1,797,523	3,904	5,091	289,478	652,800
1929 ..	99	1,487,410	3,633	6,893	250,253	602,900
1930 ..	84	1,515,559	8,307	10,846	255,015	624,600

In 1929-30 the number of persons employed in quarries was 1,780, and the wages paid amounted to £441,083. These figures include the employees and wages connected with stone-breaking and tar-paving works, most of which are carried on in conjunction with quarries and cannot be separated therefrom.

MANUFACTURING IN VICTORIA.

It can be said with confidence that the State of Victoria has advantages which should make possible great development in manufacturing industries.

A comparatively compact territory with a temperate climate producing a rich variety of raw materials, an intelligent labour supply supported by almost unlimited power resources, and a growing home market served by an ever-increasing network of railways and other communications leave few other essential requirements except the attraction of capital into the industries, the efficient organization of production, and the extension of markets for the product.

Industrial progress. Statistical records of factories date from 1850, when the number of factories in Victoria was 68. In 1900 the total had reached 3,097, employing 64,207 persons, and fairly regular expansion has since taken place concurrent with the increase in the population and consequent extension of the home market, until in 1929-30 the total number of factories was 8,195, employing 151,009 persons. Within the last ten years the number of factories has increased by 25 per cent., the number of persons employed by 4 per cent., the amount of salaries and wages paid by 43 per cent., the value of output by 16 per cent., the value of machinery and plant, land and buildings by 103 per cent., and the horse-power of factory machinery by 156 per cent. Within this period many new industries have been established, of which perhaps the most important is the opening of the brown coal deposits at Yallourn for generation of electricity and the manufacture of briquettes, an undertaking which is likely to have the most far-reaching effect on the future development of Victorian manufacturing.

Figures for the past three years give evidence of a check in the development of manufacturing industries. A depression which prevails at present in Victoria and the other states of Australia was not intense until the last quarter of the year 1929-30, and it is not reflected to any great extent in the manufacturing statistics now published.

The number of factories decreased by two since the year 1928-29, and the numbers of persons employed by 5,559. The fall in the value of output was £5,086,364, or 4 per cent. on the value for the preceding year, but this was contributed to largely by the drop of £3,330,154 in the cost of materials used.

The appended table summarizes particulars which indicate the growth of manufacturing industry since 1911. The figures for 1927-28, 1928-29, and 1929-30 have been increased by the inclusion of statistics

relating to the bakery industry (see page 428), and allowance for this should be made when comparing the figures for the last three years with those of previous years.

GROWTH IN THE MANUFACTURING INDUSTRIES.

Year.	Number of Factories	Number of Persons employed.	Value of Plant, Machinery, Land, and Buildings.	Amount of Salaries and Wages paid.	Value of Materials used (including containers).	Value of Output.
1	2	3	4	5	6	7
			£	£	£	£
1911 ..	5,126	111,948	18,257,889	8,911,019	25,029,525	41,747,863
1912 ..	5,263	116,108	19,457,795	10,102,244	27,002,302	45,410,773
1913 ..	5,613	118,744	20,775,738	10,714,336	28,465,699	47,936,647
1914 ..	5,650	118,399	21,975,646	11,099,940	28,986,694	49,439,985
1915 ..	5,413	113,834	22,529,072	11,036,345	30,728,743	51,466,093
1916-17..	5,445	116,970	23,784,289	11,833,517	37,103,350	60,047,284
1917-18..	5,627	118,241	25,460,282	12,502,601	42,133,636	67,066,715
1918-19..	5,720	122,349	27,318,735	14,080,403	52,098,737	80,195,677
1919-20..	6,038	136,522	30,804,520	17,702,173	65,563,104	101,475,363
1920-21..	6,532	140,743	35,392,735	21,377,216	65,401,425	106,008,294
1921-22..	6,753	144,876	40,992,280	23,846,495	60,352,561	106,243,181
1922-23..	7,096	152,625	46,423,240	25,457,192	62,568,163	111,286,343
1923-24..	7,289	156,162	53,196,475	27,472,084	62,217,874	113,921,927
1924-25..	7,425	154,158	61,031,975	29,057,052	65,205,233	118,177,398
1925-26..	7,461	152,959	60,396,500	29,329,400	67,164,445	119,986,439
1926-27..	7,690	161,639	63,850,005	31,822,589	69,816,935	127,397,951
1927-28..	8,245	160,357	67,507,020	32,087,851	69,637,778	128,465,317
1928-29..	8,197	156,568	69,909,370	31,533,586	70,100,456	127,897,463
1929-30..	8,195	151,009	72,011,020	30,517,535	66,770,302	122,811,099

NOTE.—Up to the year 1915 inclusive the statistics relate to the calendar year; for subsequent years they relate to the year ending 30th June.

Prior to 1924-25, column 5, Salaries and Wages Paid, was not inclusive of amounts taken by working proprietors as drawings.

**Factories and
Wages Board
Legislation.**

The first Factories Act in Victoria was passed in 1873, and since that year many other Acts dealing with the subject have been placed upon the statute-book. The *Factories and Shops Act* 1928 consolidated all Acts passed prior to that date. The general provisions of factory legislation, including "Wages Boards," are fully dealt with in Part VII., "Social Condition," of this *Year-Book*.

Added Value.

In estimating the relative importance of various industries or the value of manufacturing industry as a whole, the method used is to calculate the value added in the process of manufacture, termed "added value." This is arrived at in the following way:—From the value of output of each industry are deducted the most important items of manufacturing expense such as costs of raw materials, containers, fuel and light, repairs to plant and machinery, replacement of tools, and any other important cost of manufacture, the difference being the value added to raw materials in the process of manufacture, and representing the fund available for the payment of wages, rent, interest, minor expenses, and profit.

It is considered that an inaccurate idea would be obtained by using the total value of output of manufacturing industries in year to year comparisons, owing to the duplication of materials used, the finished product of one process of manufacture forming, as it often does, the raw material for another. Woollen manufactures might be cited as an example. Greasy wool forms the raw material for the woolscouring industry, the product of which is scoured wool. This is afterwards combed into wool tops which are used in the spinning mills for the manufacture of yarn. In due course the yarn is woven into cloth, the raw material for the clothing industry. If these processes are carried out separately in different factories it is evident that the value of the wool would be counted five times by using value of output as the basis for annual comparisons of manufacturing production.

Added value prevents this double counting, gives a truer picture of the relative economic importance of industries, and also provides a good basis for estimating and comparing productive efficiency in manufacturing.

As added value is based on value of output, the added value per employee is affected not only by output per employee, but also by the

price obtained, and should, therefore, be corrected to allow for variations in price levels. Another important factor is the quantity and efficiency of the machinery used in the process of manufacture.

The following table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1930:—

VALUE ADDED, 1929-30.

Class of Industry.	Average Number of Persons Employed.	Value Added.	Value Added per Person Employed.
		£	£ s. d.
1. Treating raw materials product of agricultural and pastoral pursuits, &c.	3,232	1,302,222	402 18 4
2. Treating oils and fats—animal, vegetable, &c.	823	548,141	666 0 7
3. Processes in stone, glass, clay, &c.	5,026	2,086,066	415 1 1
4. Working in wood	6,509	2,227,475	342 4 4
5. Metal works, machinery, &c.	25,439	8,349,136	328 4 0
6. Connected with food and drink, &c.	20,628	10,263,873	497 11 5
7. Clothing and textile fabrics, &c.	53,115	12,078,359	227 8 0
8. Books, paper, printing, and engraving	11,451	3,984,993	348 0 1
9. Musical instruments, &c.	466	172,442	370 0 11
10. Arms and explosives	506	217,100	429 1 0
11. Vehicles and fittings, saddlery, harness, &c.	7,646	2,330,467	304 15 11
12. Ship and boat building and repairing	385	125,444	325 16 7
13. Furniture, bedding, upholstery	4,117	1,205,832	292 17 10
14. Drugs, chemicals, and by-products	2,522	1,529,078	606 5 11
15. Surgical and scientific instruments	246	85,701	348 7 7
16. Jewellery, time-pieces, and plated ware	1,077	320,967	298 0 5
17. Heat, light, and power	3,231	2,613,937	809 0 4
18. Rubber and leatherware, n.e.i.	4,143	1,665,537	402 0 3
19. Minor wares, n.e.i.	447	152,598	341 7 8
Total.	151,009	51,259,368	339 8 11

The table hereunder has been compiled in an endeavour to supply comparable figures of the value added per employee in Victorian factories for each of the past ten years.

In recent years various alterations have been made in the method of arriving at this important concept, following recommendations by Australasian statisticians in annual conferences, the objects of which

are to improve the statistics and to obtain uniformity throughout the Commonwealth.

The result is that any calculations of added value based on past published statements would not be strictly comparable.

The value added per employee has been recalculated, using the latest year as base and adjusting the previous years.

Prior to 1927-28, bakeries were not included, but the effect of their inclusion is relatively small. In 1927-28, value added per employee in Bakeries was £371 12s. 11d., in 1928-29 £410 18s. 8d. and in 1929-30, £415 4s. 1d. To exclude these from the aggregate figures would reduce the added value per employee to £334 14s. 3d. in 1927-28, to £337 2s. 9d. in 1928-29, and to £337 18s. 9d. in 1929-30.

VALUE ADDED IN MANUFACTURING.

Year.	Value of Output.	Expenses of Manufacturing.*	Value Added.	Average Number of Persons Employed.	Value Added per Person Employed.
1.	2.	3.	4.	5.	6.
	£	£	£		£ s. d.
1919-20 ..	101,475,363	68,524,324	32,951,039	136,522	241 7 3
1920-21 ..	106,008,294	68,878,822	37,129,472	140,743	263 16 2
1921-22 ..	106,243,181	63,978,488	42,264,693	144,876	291 14 7
1922-23 ..	111,286,343	66,459,537	44,826,806	152,625	293 14 1
1923-24 ..	113,921,927	66,410,960	47,510,967	156,162	304 4 10
1924-25 ..	118,177,398	69,611,632	48,565,766	154,158	315 0 9
1925-26 ..	119,986,439	71,784,661	48,201,778	152,959	315 2 7
1926-27 ..	127,397,951	74,774,770	52,623,181	161,639	325 11 2
1927-28 ..	128,465,317	74,667,052	53,798,265	160,357	335 9 9
1928-29 ..	127,897,463	74,872,184	53,025,279	156,568	338 13 5
1929-30 ..	122,811,099	71,551,731	51,259,368	151,009	339 8 11

* Expenses of manufacturing includes the following costs only :—Raw materials, containers, fuel and light, tools replaced, repairs to plant and machinery, lubricating oil, and water.

Column 3 deducted from column 2 gives column 4, which when divided by column 5 gives column 6.

In the year 1902 the classification of industries for statistical purposes, as shown in the next table, was adopted by the Statisticians of Australia. A factory was defined as an establishment employing on the average four persons or more, or an establishment employing less than four persons where machinery is worked by other than manual power, whether the business carried on is that of making or repairing for the trade (wholesale or retail) or for export. The table shows for the year 1929-30 the number of factories in each industry, the horse-power used, the average number of persons employed, the wages paid, the values of materials and fuel and light used, and the value of articles produced or work done, and has been compiled from returns rendered compulsorily by all factory proprietors:—

Production of
different
industries,
1929-30.

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1929-30.

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Victorian Year-Book, 1929-30.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
<i>Class I.—Treating Raw Material the product of Pastoral Pursuits, or Vegetable Products, not otherwise classed.</i>										
Boiling down, bone milling ..	19	1,072	13	271	..	4	78,652	25,374	216,460	359,672
Sausage skins	6	30	5	252	..	1	67,437	657	106,551	209,405
Tanning	44	3,840	57	1,754	..	27	449,027	33,288	1,417,919	2,197,709
Fellmongering	33	1,846	18	429	..	2	111,480	21,853	1,156,831	1,411,324
Chaffcutting and grain crushing ..	132	2,150	32	355	..	12	92,554	11,919	99,451	257,187
Total	234	8,938	125	3,061	..	46	799,150	93,091	2,997,212	4,435,297
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>										
Oil, grease, glue	9	651	10	155	..	5	41,231	13,790	195,780	307,218
Soap and candle	17	828	8	492	..	153	138,450	31,282	636,295	1,138,963
Total	26	1,479	18	647	..	158	179,681	45,072	832,075	1,446,181

*Class III.—Processes relating to
Stone, Clay, Glass, &c.*

Bricks, tiles, pipes, and pottery ..	77	8,838	52	2,005	..	108	483,873	214,917	125,978	1,084,452
Cement, including cement tiles and pipes ..	37	11,808	10	812	..	5	209,201	182,868	304,452	1,079,503
Glass, including bottles ..	25	1,854	19	792	..	21	216,496	57,983	161,967	630,434
Marble and stone dressing ..	43	846	45	417	..	7	120,111	3,870	75,419	243,677
Modelling ..	55	798	61	520	..	13	142,512	4,432	181,759	426,624
Lime and asbestos ..	12	616	7	131	..	1	31,953	21,046	20,783	87,995
Total ..	249	24,760	194	4,677	..	155	1,204,146	485,116	870,358	3,552,685

Class IV.—Working in Wood.

Boxes and cases ..	47	1,525	34	387	1	6	112,177	4,788	188,975	365,631
Cooperage ..	12	435	8	255	..	1	85,073	2,572	68,966	186,818
Saw-milling, joinery, &c. ..	316	10,533	201	3,083	..	64	787,292	30,214	1,140,230	2,240,044
Forest saw-mills ..	169	3,945	181	1,695	..	6	430,639	4,590	144,767	876,376
Wood carving, turning ..	89	1,393	71	480	..	36	131,096	5,293	142,776	342,092
Total ..	633	17,831	495	5,900	1	113	1,546,277	47,457	1,685,714	4,010,961

Class V.—Metal Works, Machinery, &c.

Agricultural implement ..	72	2,656	68	2,469	..	102	603,817	41,540	537,545	1,378,287
Art metal works ..	14	195	9	138	..	5	34,635	1,535	33,477	80,023
Brass and copper ..	87	1,019	95	1,018	..	39	261,400	13,801	210,912	576,545
Engineering ..	295	7,984	308	5,238	1	147	1,430,346	73,976	1,483,434	3,607,883
Ironworks and foundries ..	169	7,034	169	3,468	1	245	884,857	91,840	861,672	2,245,262
Railway workshops ..	20	4,704	..	6,455	..	7	1,635,683	78,229	1,594,998	3,810,552
Stoves, ovens ..	23	779	25	399	..	13	104,397	11,191	73,047	240,835
Tinsmithing ..	104	1,079	78	1,687	..	289	388,896	19,875	682,083	1,366,470
Wireworking ..	26	771	34	382	..	30	106,104	3,771	262,495	449,790
Other metal works ..	56	732	30	340	..	29	89,780	9,124	152,512	312,602
Electrical apparatus ..	108	1,037	73	1,281	1	129	312,501	12,706	358,224	839,616
Other ..	48	794	37	593	..	7	160,487	7,152	310,452	553,000
Total ..	1,022	28,784	926	23,468	3	1,042	6,012,903	364,740	6,560,851	15,460,865

Factories—Power, Workers, Wages, etc., and Production, 1929-30—continued.

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Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
<i>Class VI.—Connected with Food and Drink, &c.</i>							£	£	£	£
Bacon	19	1,798	22	496	1	25	144,120	23,075	1,043,360	1,367,179
Butter, cheese	163	7,003	31	2,052	..	304	586,395	160,649	7,381,477	8,753,102
Meat freezing, preserving	13	3,937	..	887	..	20	242,496	30,518	1,609,387	2,074,443
Confectionery	140	6,784	81	1,564	13	1,439	548,796	81,767	1,580,120	2,801,299
Oatmeal, starch, &c.	14	2,628	5	300	2	214	106,991	21,936	552,120	844,099
Flour-milling, &c.	38	5,591	26	850	..	22	247,692	52,163	4,355,538	5,106,194
Jam, fruit, sauce, &c.	65	2,832	20	1,602	2	1,130	527,690	39,174	1,715,487	2,876,856
Aerated water, cordial, &c.	108	687	76	613	2	107	171,715	8,542	325,816	653,278
Brewing, &c.	9	4,186	..	1,148	..	5	409,815	65,502	1,019,847	2,334,283
Condiments, coffee, cocoa	54	805	8	339	2	294	113,018	7,925	721,521	1,011,687
Distilling	8	752	2	120	..	2	33,896	13,350	178,058	343,819
Ice, refrigerating	52	5,129	32	219	..	10	75,465	41,427	17,772	210,492
Malt	20	693	8	284	..	7	94,022	20,244	398,193	654,408
Tobacco, &c.	12	725	16	897	..	562	322,842	9,150	1,183,235	2,005,347
Bread, pastry, and cake	464	1,944	392	2,190	63	306	719,055	82,347	1,987,669	3,313,820
Other	21	3,965	12	1,247	1	556	355,583	87,859	3,935,803	4,907,617
Total	1,200	49,459	731	14,808	86	5,003	4,699,591	745,628	28,005,403	39,257,923

*Class VII.—Clothing and Textile
Fabrics, and Fibrous Material.*

Woollen, cotton mills	42	15,427	21	3,086	..	4,082	1,119,622	156,107	2,204,019	4,302,464
Knitting, hosiery	190	2,564	132	1,692	62	6,109	1,072,342	43,862	2,066,222	4,003,915
Boots, shoes, and accessories	197	3,601	244	5,473	14	5,018	1,926,875	37,457	2,917,920	5,728,739
Boot repairs	372	476	313	268	2	11	121,037	2,897	81,389	255,528
Clothing	485	621	448	1,478	53	6,148	1,197,924	23,743	1,929,630	3,576,817
Waterproof clothing	8	79	6	56	..	191	38,846	926	52,316	117,161
Dressmaking and millinery	474	670	164	344	317	7,231	1,004,976	15,112	1,771,595	3,220,321
Fur	55	99	47	174	12	290	88,933	1,640	334,208	498,828
Hats and caps	52	602	40	497	5	1,157	283,648	12,306	427,271	867,087
Underclothing, shirt	186	1,208	97	522	42	5,822	829,771	16,775	1,995,312	3,349,541
Sail, tent, rope, twine, &c.	30	2,066	25	520	..	366	168,627	15,062	436,517	765,123
Other	41	505	33	253	4	246	101,910	9,006	103,384	265,070
Total	2,132	27,918	1,570	14,363	511	36,671	7,954,511	334,893	14,319,783	26,948,594

*Class VIII.—Books, Paper, Printing,
Engraving, &c.*

Paper-making, paper bags, &c.	49	4,644	33	885	3	891	336,595	81,979	616,094	1,381,797
Photo engraving	25	58	32	224	1	94	79,802	2,149	37,319	153,324
Printing	342	4,090	410	3,736	8	1,508	1,229,799	29,788	946,870	2,793,557
Newspapers	118	3,370	108	2,000	2	71	680,948	25,612	886,382	1,933,382
Die sinking, &c.	22	82	24	141	..	8	42,206	893	13,829	72,204
Bookbinding	40	638	35	662	..	575	230,014	5,757	275,501	641,285
Total	596	12,882	642	7,648	14	3,147	2,599,364	146,178	2,775,995	6,975,549

Class IX.—Musical Instruments

20	751	8	423	..	35	106,291	3,483	133,809	310,518
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Class X.—Arms and Explosives

8	865	..	339	..	167	117,648	19,199	243,269	495,980
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Production.

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1929-30—continued.

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Victorian Year-Book, 1929-30.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
<i>Class XI.—Vehicles and Fittings, Saddlery, Harness, &c.</i>										
Coachbuilding	185	1,973	192	1,269	..	12	336,105	11,988	221,052	681,602
Motor repairs and assembling ..	741	2,644	557	3,430	1	61	895,479	37,307	43,346	1,258,823
Motor body building and repairs ..	73	2,023	80	1,704	..	68	466,791	12,280	525,860	1,208,974
Perambulators	12	45	19	123	1	7	27,433	657	39,209	76,356
Saddle, harness	10	21	12	95	..	25	26,854	275	35,636	73,756
Total	1,021	6,706	860	6,611	2	173	1,752,662	62,507	865,103	3,299,511
<i>Class XII.—Ship and Aircraft Building, &c.</i>	14	1,471	14	364	..	7	99,373	3,924	45,797	176,756

Class XIII.—Furniture, Bedding, &c.

Bedding, upholstery, &c.	72	1,223	39	509	1	298	161,554	6,158	378,909	644,873
Furniture	285	3,508	316	2,096	..	67	519,600	17,496	615,311	1,364,551
Picture frame	13	37	11	61	..	11	18,084	374	18,655	43,181
Basket, wickerware	16	116	15	167	..	..	32,425	974	44,424	91,860
Other	39	239	22	280	3	221	97,091	2,096	225,691	383,375
Total	425	5,123	403	3,113	4	597	828,754	27,098	1,282,990	2,527,840

Class XIV.—Drugs, Chemicals, and By-products.

Chemicals, drugs, &c.	49	3,340	16	627	3	580	259,503	20,137	509,614	1,077,289
Paints and varnishes	19	570	15	79	..	15	24,888	1,923	95,430	150,320
Inks, polishes	20	428	7	176	..	125	62,811	2,848	262,718	438,034
Chemical fertilizers	9	3,236	1	850	..	4	227,721	37,115	1,087,680	1,957,385
Essential oils	5	4	..	24	..	..	4,765	318	16,320	25,916
Total	102	7,578	39	1,756	3	724	579,688	62,341	1,971,762	3,648,944

Class XV.—Surgical and Scientific Appliances

.. ..	46	89	28	200	1	17	56,717	1,701	42,711	131,503
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Class XVI.—Time-pieces, Jewellery, and Plated-ware

.. ..	118	849	111	843	2	121	218,853	9,011	218,915	552,078
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Class XVII.—Heat, Light, and Energy.

Electric light	91	248,193	4	1,223	..	3	354,823	668,478	1,608	1,873,361
Gas, coke	36	2,592	..	901	..	4	261,547	132,855	1,121,371	2,073,435
Other	11	5,536	3	506	..	587	209,723	57,835	706,276	1,498,821
Total	138	256,321	7	2,630	..	594	826,093	859,168	1,829,255	5,445,617

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1929-30—continued.

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Victorian Year-Book, 1929-30.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
<i>Class XVIII.—Rubber and Leather-ware (except Saddlery and Harness).</i>							£	£	£	£
Rubber goods	102	12,866	73	2,158	1	1,029	682,534	109,721	1,586,213	3,209,032
Fancy leather, belting, &c. . .	60	594	57	504	1	320	164,331	7,968	320,561	577,638
Total	162	13,460	130	2,662	2	1,349	846,865	117,689	1,906,774	3,786,670
<i>Class XIX.—Wares, not elsewhere included.</i>										
Toys	13	61	8	41	..	2	10,666	355	15,357	30,612
Umbrella	5	15	4	33	..	81	18,620	226	34,487	66,991
Other Industries	31	399	17	218	4	39	59,682	6,850	132,682	250,024
Total	49	475	29	292	4	122	88,968	7,431	182,526	347,627
Grand Total	8,195	465,739	6,330	93,805	633	50,241	30,517,535	3,435,727	66,770,302	122,811,099

Many of the important manufacturing industries in the State have shown a substantial increase in the value of output in the last five years. The output for the years 1924-25 and 1929-30 of a number of leading industries is shown in the following table, the industries being arranged in order of increase in value of output over the period.

OUTPUT OF INDUSTRIES, 1924-25 AND 1929-30.

Industry.	Value of Output.		Increase in Five Years.	
	1924-25.	1929-30.	Value.	Per cent.
	£	£	£	
Hosiery, knitting	2,275,145	4,003,915	1,728,770	76·0
Rubber goods	1,989,793	3,209,032	1,219,239	61·3
Textile mills	3,433,231	4,302,464	869,233	25·3
Motor body, motor repairs, &c.	1,625,386	2,467,797	842,411	51·8
Jam, fruit, sauce	2,090,690	2,876,856	786,166	37·6
Underclothing, shirt ..	2,682,606	3,349,541	666,935	24·9
Railway workshops	3,254,715	3,810,552	555,837	17·1
Butter, cheese, &c.	8,212,788	8,753,102	540,314	6·6
Mineral oil	317,417	710,002	392,585	123·7
Condiments, coffee, &c. ..	625,997	1,011,687	385,690	61·6
Electrical apparatus	494,011	839,616	345,605	70·0
Distilling	129,655	343,819	214,164	165·2
Explosives	202,875	376,735	173,860	85·7
Dressmaking, millinery ..	3,047,653	3,220,321	172,668	5·7
Briquetting	49,470	214,547	165,077	333·7
Furriers	361,257	498,828	137,571	38·1
Cement, cement pipes and tiles	942,034	1,079,503	137,469	14·6
Stoves, ovens	114,934	240,835	125,901	109·5
Chemicals, drugs	969,851	1,077,289	107,438	11·1

INDIVIDUAL INDUSTRIES.

The salient features of the chief industries are set forth in the succeeding pages.

Tanning was one of the earliest industries established in Victoria; in the year 1850 there were thirteen tanneries in the State. Particulars relating to the industry for the year 1920-21, and the past four years are given in the following table:—

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	48	44	42	42	44
Number of persons engaged ..	2,137	2,304	1,899	1,879	1,838
Horsepower of engines used ..	3,179	4,203	3,948	4,005	3,840
Value of plant and machinery £	277,160	426,250	399,160	366,680	336,835
Value of land and buildings £	338,985	479,505	486,370	472,830	454,580
Salaries and wages paid £	446,231*	570,283	476,559	466,000	440,027
Fuel, light, and power £	35,610	41,896	39,905	33,824	33,288
Value of materials used £	2,096,554	1,814,634	1,724,767	1,897,630	1,417,919
Value of output £	2,943,173	2,760,910	2,623,798	2,722,296	2,197,709
Value added to materials £	811,009	886,956	831,315	764,892	720,999
Materials treated—					
Cow and ox hides ..	694,322	660,905	539,327	624,681	638,915
Calf hides ..	308,542	645,945	465,543	455,902	429,373
Sheep and other skins ..	1,406,472	1,487,458	1,275,843	1,130,352	1,048,002
Bark used tons	10,709	12,446	9,792	10,931	11,709
Sole leather produced lbs.	14†	13,559,107	11,959,650	11,916,309	12,624,029

* Exclusive of drawings of working proprietors. † Not available.

The value of leather, mostly glaze kid, imported into Victoria from oversea countries during the year ended 30th June, 1930, was £148,249, and the value of leather exported in the same period was £119,962.

The manufacture of soap was also one of the earliest of Victorian industries. In the year 1850 the recorded production of the four establishments then operating was 5,840 cwt. of soap. The following table indicates the development which has since taken place.

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	16	18	17	17	17
Number of persons engaged ..	696	705	666	671	653
Horsepower of engines used ..	472	768	824	851	828
Value of plant and machinery £	164,110	235,705	231,700	240,640	246,020
Value of land and buildings £	135,995	169,845	236,800	188,840	204,895
Salaries and wages paid ..	115,749*	145,502	141,241	141,107	138,450
Fuel, light and power £	37,545	40,000	35,461	36,628	31,282
Value of materials used £	799,098	646,322	635,309	703,126	636,295
Value of output ..	1,134,820	1,111,040	1,140,394	1,230,451	1,138,963
Value added to materials £	298,177	408,267	437,548	461,697	455,107
Materials treated—					
Tallow .. cwt.	134,431	196,425	196,304	215,519	197,953
Alkali .. lbs.	4,934,384	8,173,694	7,857,046	9,029,663	8,738,272
Cocra oil .. cwt.	16,882	25,562	26,281	27,182	26,112
Output—					
Soap household .. cwt.		285,029	282,038	298,343	285,324
" Sand ..	225,748	20,060	21,064	48,656	28,346
" Toilet ..		20,139	20,628	14,057	14,464
Soda crystals .. lbs.	1,214,080	3,864,074	3,634,988	3,709,104	3,488,576

* Exclusive of drawings of working proprietors.

Other items of manufacture include soft soap, wool scouring soap, soap extract, candles, glycerine, &c. Soap manufactured in small soap works not classified as factories, and not included above, amounted to 996 cwt. in 1921, 853 cwt. in 1926-27, 874 cwt. in 1927-28, 755 cwt. in 1928-29 and 688 cwt. in 1929-30.

The imports from oversea countries in 1929-30 included 417,252 lbs. of soap valued at £23,981, and 56,712 lbs. of candles, &c., valued at £3,883.

These industries are grouped because some establishments which produce bricks also manufacture tiles, and others which produce tiles, also manufacture pipes and pottery. Factories manufacturing cement pipes and tiles are not included herein, but are grouped with cement and cement products.

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	92	95	83	76	77
Number of persons engaged ..	2,794	2,721	2,524	2,321	2,165
Horse-power of engines used ..	5,547	8,576	8,827	8,459	8,838
Value of plant and machinery £	369,240	529,970	519,710	503,770	499,205
Value of land and buildings £	375,320	535,675	545,260	564,270	581,765
Salaries and wages paid £	*481,352	631,362	576,593	538,952	483,873
Fuel, light, and power £	171,441	264,432	240,254	223,231	214,917
Value of materials used £	105,768	173,889	156,492	142,869	125,978
Value of output ..	£ 1,025,105	1,475,557	1,326,205	1,171,830	1,084,452
Value added to materials £	747,896	987,426	874,882	761,318	703,619
Production—					
Bricks, common .. No.	203,425,000	230,914,000	198,775,000	179,528,000	162,676,000
Firebricks .. No.	†	5,114,713	5,502,323	3,453,000	3,595,000
Roofing tiles .. No.	†	16,114,000	12,030,470	9,254,320	8,939,839
Pipes ..	£ 107,133	202,654	171,908	161,771	145,430
Pottery ..	£ 177,410	158,071	177,225	124,839	126,708

* Exclusive of drawings of working proprietors. † Not available.

The estimated value of bricks made in 1929-30 was £556,125, being a decrease of £33,543 as compared with the value of those made in the preceding year.

Detailed information in regard to the forest saw-mills of the State for the five years 1925-26 to 1929-30 is given in the table which follows:—

FOREST SAW-MILLS, 1925-26 TO 1929-30.

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Amount of Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
		£		£	super ft.	£
1925-26 ..	215	642,140	2,955	579,795*	109,534,000	711,971
1926-27 ..	207	573,550	2,862	597,744*	115,813,000	914,334
1927-28 ..	185	516,800	2,528	536,708*	100,567,000	782,700
1928-29 ..	171	443,640	1,758	406,532*	79,018,000	676,200
1929-30 ..	169	447,080	1,882	430,639*	86,145,000	681,625

* Including amounts drawn by working proprietors.

Forest
Saw-mills.

A dispute over the question of wages and hours caused a stoppage of this industry for a period of 27 weeks during the year 1928-29.

In addition to the forest saw-mills there were 464 other factories working in wood. Particulars relating to these for the year 1929-30 are given on page 417.

Firewood. The quantity of timber sawn for firewood consumption in the year 1929-30 was 262,431 tons valued at the saw-mills at £253,580. There is also a large amount of firewood taken from the forests which does not pass through these sawmills, and its value cannot be reliably estimated. The increased use of brown coal briquettes and the extension of the use of gas and electricity for cooking and heating has caused a reduction in the demand for firewood in recent years.

**Agricultural
and Dairy
Machinery
Works.**

Agricultural and Dairy Machinery Works have been tabulated jointly since 1925-26, owing to a revision of the classification of Victorian statistics. Comparable figures are therefore available for the past four years only.

**AGRICULTURAL AND DAIRY MACHINERY WORKS,
1926-27 TO 1929-30.**

Year.	No. of Factories.	Persons Employed.	Salaries and Wages Paid.	Value of—		
				Fuel and Light Used.	Materials Used.	Output.
			£	£	£	£
1926-27 ..	73	3,820	931,404	51,620	891,930	2,228,570
1927-28 ..	77	3,353	806,978	57,011	801,008	2,003,855
1928-29 ..	71	3,239	762,977	49,243	738,414	1,885,154
1929-30 ..	72	2,639	603,817	41,540	537,545	1,378,287

In the following table particulars of bacon and ham curing establishments are given for the year 1920-21 and the past four years.

BACON CURING.

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	22	21	21	19	19
Number of persons employed ..	442	560	539	556	544
Horse-power of engines used ..	1,343	1,821	1,825	1,838	1,798
Value of land, buildings, plant, &c. ..	£ 276,295	319,115	340,820	352,260	348,270
Salaries and wages paid ..	£ 90,394*	151,622	145,452	147,369	144,120
Value of materials used ..	£ 1,098,832	1,063,199	1,097,918	1,109,616	1,043,360
Value of fuel and light ..	£ 12,911	20,552	21,507	21,787	23,075
Value of output ..	£ 1,335,186	1,425,509	1,426,533	1,409,897	1,367,179
Pigs slaughtered for curing No. ..	139,881	230,391	210,547	198,131	218,799
Bacon and ham cured—					
In factories .. lbs.	18,369,107	19,739,524	19,628,277	18,611,728	18,222,220
On farms .. lbs.	1,755,993	1,212,786	976,871	789,719	666,317

* Excluding drawings of working proprietors.

The number of butter, cheese, and kindred factories in 1929-30 was 163. Of these 133 were making butter, 22 cheese, 3 concentrated milk, 4 condensed milk, 12 powdered milk, 7 casein, and 1 milk sugar. There were also 22 creameries attached to the factories. The following table gives some indication of the value of this industry to the State :—

BUTTER AND CHEESE FACTORIES, 1920-21 to 1929-30.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Persons Employed.	Salaries and Wages Paid.	Value of Output.
		£		£	£
1920-21	184	1,238,745	2,127	414,420	9,194,654
1921-22	188	1,395,425	2,351	492,446	7,115,642
1922-23	182	1,509,545	2,278	497,816	7,899,377
1923-24	184	1,685,530	2,280	511,001	7,974,676
1924-25	186	1,812,525	2,427	565,422*	8,212,788
1925-26	183	1,889,475	2,213	528,310*	7,631,400
1926-27	182	1,969,280	2,320	552,659*	7,813,409
1927-28	179	2,021,330	2,426	572,907*	8,681,454
1928-29	169	1,931,360	2,449	582,411*	9,614,084
1929-30	163	2,040,085	2,387	586,395*	8,753,102

* Including amounts drawn by working proprietors.

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on page 393.

BAKERIES (INCLUDING BREAD, PASTRY, AND CAKES, ETC.), 1927-28 to 1929-30.

Statistics relating to the manufacture of bread, pastry, and cakes were first compiled in the year 1928.

Figures for the past three years only are therefore available and cover about 44 per cent. of the establishments, the remaining 56 per cent. being too small to be classified as factories according to the

statistical definition. In 1927-28, 669 small factories, representing the 56 per cent. excluded from the statistics, used 32,889 tons of flour and produced, among other items, 20,851,188 4-lb. loaves of bread.

The total value of output of the industry as stated hereunder includes the value of all articles produced, but details relating to the output of pastry, cakes, pies, scones, &c., have not been tabulated. It must be explained that the value quoted is the wholesale selling value of the goods produced at the factory exclusive of all selling and delivery costs.

BAKERIES, 1927-28 to 1929-30.

Item.	1927-28.	1928-29.	1929-30.
Number of factories	519	487	464
Average number of persons employed	3,367	3,248	2,951
Actual horse-power of engines used	1,774	1,822	1,944
Value of land and buildings	£1,025,220	£1,087,550	£1,019,260
Value of plant and machinery	£344,970	£368,050	£366,290
Salaries and wages paid	£772,704	£767,117	£719,055
Value of materials used	£2,218,452	£2,045,012	£1,987,669
Fuel, light, and power used	£86,592	£84,436	£82,347
Repairs, oil, and water used	£19,077	£16,828	£18,529
Total output	£3,575,645	£3,480,992	£3,313,820
Value added in process of manufacture	£1,251,524	£1,334,716	£1,225,275
Value added per employee	£371	£411	£415
Flour used—short tons	89,135	90,943	104,069
Bread made—4-lb. loaves	52,812,500	54,656,000	53,852,013

Meat freezing and preserving works numbered thirteen in 1929-30, and gave employment to 907 hands, the wages paid amounting to £242,496. The approximate value of machinery, plant, land and buildings in that year was £973,280. Further details regarding this industry appear on page 418, and particulars of the output for the past five years are given in the following table :—

Item.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Frozen meat—					
Cattle	102,432	41,890	19,500	6,297	7,784
Sheep	1,480,824	1,346,425	915,545	1,590,573	1,825,019
Rabbits and hares	913,698	806,294	1,055,976	3,248,558	2,949,796
Poultry	6,906	1,764	6,234	8,732	4,872
Preserved meat—					
Beef and mutton	25,286	14,880	12,890	9,544	4,628
Rabbits and hares	29	4	4	3	2
Other meats, &c.	4,327	3,700	3,885	4,459	2,726

The following statement shows the imports from and exports to overseas countries of frozen and preserved meats, other than bacon and ham, during the year ended 30th June, 1930 :—

Imports and
exports of
meats.

MEATS IMPORTED AND EXPORTED OVERSEA, 1929-30.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Beef	300 lbs.	6	503,264 lbs.	10,471
Game	3,351 „	282	.. ..	..
Lamb .. ..	.. ..	..	47,238,316 lbs.	1,279,836
Mutton .. ..	.. ..	..	13,666,929 „	248,021
Pork	44,466 lbs.	1,195	14,017 „	481
Poultry	28 „	3	2,436 prs.	1,555
Rabbits and Hares .. ..	.. ..	..	1,474,898 „	123,492
Potted and Concentrated .. ..	.. ..	36,662	.. ..	12
Preserved in tins	185,090 lbs.	9,898	419,432 lbs.	15,607
Sausage Casings	3,498 cwt.	43,892	12,248 cwt.	162,934
Other .. ..	.. ..	239	.. ..	22,869
Total value .. ..	.. ..	92,177	.. ..	1,865,278

Victorian flour mills produce ample flour, etc., to supply all local requirements and a considerable surplus for export. During the year 1929-30, 179,452 tons of flour, valued at £1,880,057, were exported from Victoria to countries beyond Australia. The following table gives particulars of the industry for the year 1920-21 and the past four years :—

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	51	44	42	41	38
Number of persons engaged ..	947	1,094	971	985	898
Horse-power of engines used ..	5,253	6,073	5,934	5,982	5,591
Value of plant and machinery £	373,060	603,095	652,300	634,510	580,835
Value of land and buildings £	260,760	443,080	466,400	468,600	431,710
Salaries and wages paid £	191,688*	267,873	267,347	269,913	247,692
Fuel, light, and power £	45,121	50,068	53,027	53,677	52,163
Value of materials used £	5,120,260	5,017,009	4,866,676	4,593,331	4,355,538
Value of output	5,745,507	5,789,618	5,665,103	5,378,763	5,106,194
Value added to materials £	580,126	702,232	721,590	708,551	677,443
Wheat ground into flour bushels	12,387,960	17,052,350	17,659,570	18,545,041	17,227,886
Flour produced .. tons	260,032	360,051	367,383	390,286	364,682
Bran produced .. bushels	5,927,595	7,472,640	7,987,930	8,228,720	7,238,198
Pollard produced ..	5,008,083	7,415,832	7,264,370	7,762,370	7,667,061
Wheatmeal produced .. cwt.	†	18,339	28,874	48,010	57,276

* Exclusive of drawings of working proprietors.

† Not available.

Particulars relating to jam, pickle, sauce, fruit and vegetable canning factories are given in the table hereunder, which shows the main items of output, etc., for the past five years:

Item.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	57	35	35	38	39
Number of persons engaged ..	2,623	2,246	2,361	2,126	2,261
Horse-power of engines used ..	1,651	1,376	1,663	2,148	2,085
Value of plant and machinery £	291,045	269,825	304,130	307,560	286,240
Value of land and buildings £	385,205	384,425	435,080	453,390	460,635
Salaries and wages paid £	446,765	424,196	466,016	393,685	418,024
Fuel, light, and power used £	31,199	33,952	37,106	32,815	35,496
Value of materials used £	1,292,172	1,402,976	1,618,263	1,347,853	1,607,306
Value of output ..	2,177,677	2,217,113	2,660,244	2,202,502	2,592,061
Fruit used .. cwt.	674,793	792,283	960,004	601,722	1,052,534
Sugar used .. "	209,648	246,170	295,331	253,735	308,012
Output of—					
Jams and jellies .. cwt.	236,345	300,822	340,847	285,636	335,530
Fruit preserved .. "	350,363	335,798	479,928	351,048	510,298
Fruit pulped .. "	168,906	110,420	121,060	57,648	150,647
Sauce .. pints	9,305,590	7,385,438	7,312,500	7,905,541	8,806,347
Pickles .. "	2,686,500	2,615,267	1,487,990	1,803,764	1,451,693

* Figures for 1925-26 include 21 Fruit Packing establishments.

The following table contains particulars relating to the production, etc., of sugar in the beet sugar factory in which work is carried on under the control of the Victorian Government at Maffra, Gippsland.

A brief survey of the progress of this industry since its establishment was given in the *Victorian Year-Book* for 1928-29.

Season.	Area Harvested.	Sugar Beet Harvested.	Sugar Produced.
	acres.	tons.	tons.
1925-26	1,880	21,194	2,315
1926-27	2,024	9,851	1,177
1927-28	2,353	25,439	2,349
1928-29	2,130	15,236	2,108
1929-30	2,500	26,525	3,472

Particulars regarding breweries for the ten years 1920-21 to 1929-30 are set forth in the next table. Machinery and plant were valued at £441,470 in 1920-21 and at £1,007,420 in 1929-30, whilst land and buildings were valued at £391,385 and £714,795 respectively in those years. The wages paid in 1929-30 amounted to £409,815.

BREWERIES, 1920-21 to 1929-30.

Year.	Number of Breweries.	Persons Employed.	Materials Used—			Beer and Stout Made.	Value of Output.
			Sugar.	Malt.	Hops.		
			cwt.	bushels.	lbs.	gallons.	£
1920-21	16	1,054	104,140	753,260	736,580	22,257,000	2,098,720
1921-22	15	1,053	107,160	688,090	717,950	22,388,000	2,200,882
1922-23	14	1,091	110,051	723,511	768,870	23,212,000	2,322,814
1923-24	14	1,186	112,840	743,131	796,769	23,907,000	2,412,387
1924-25	14	1,263	113,729	744,048	784,080	23,286,000	2,479,619
1925-26	11	1,113	118,310	777,041	811,063	24,347,000	2,594,835
1926-27	10	1,156	121,666	814,298	831,317	26,484,000	2,605,704
1927-28	9	1,169	116,890	815,882	814,812	25,870,000	2,534,815
1928-29	9	1,194	110,968	806,252	777,849	24,999,000	2,522,933
1929-30	9	1,153	103,328	754,288	619,218	21,952,775	2,334,283

The number of distilleries working in 1929-30 was 8, and the persons employed numbered 124, of whom two were working proprietors. The estimated value of the machinery, plant, land and buildings was £402,820. The quantities of materials used in manufacture and of spirits distilled in each of the last ten years were as follows:—

DISTILLERIES, 1920-21 to 1929-30.

Year.	Materials Used.				Spirits Distilled.
	Wine.	Malt.	Other Grain.	Molasses.	
	gallons.	bushels.	bushels.	lbs.	proof gals.
1920-21	1,041,890	125,414	1,422	2,682,960	572,671
1921-22	671,162	58,848	..	1,167,600	390,840
1922-23	1,100,568	77,717	..	85,120	473,152
1923-24	1,114,590	121,691	..	2,350,880	730,158
1924-25	1,117,370	92,124	..	2,727,650	561,153
1925-26	1,849,920	94,784	..	2,994,880	785,595
1926-27	1,874,370	212,022	..	2,437,920	995,708
1927-28	1,843,100	113,404	..	1,513,792	709,031
1928-29	1,320,046	175,833	11,192	2,278,080	813,562
1929-30	1,556,249	300,267	93,781	1,284,528	1,142,762

Spirits made by vine-growers for fortifying wine are not included in the foregoing table. The following quantities were distilled in vineyards for that purpose during the last ten years:—15,486 gallons in 1920-21, 23,020 gallons in 1921-22, 14,930 gallons in 1922-23, 13,792 gallons in 1923-24, 19,245 gallons in 1924-25, 14,850 gallons in 1925-26, 11,259 gallons in 1926-27, 10,110 gallons in 1927-28, 17,529 gallons in 1928-29, and 18,299 gallons in 1929-30.

**Tobacco
factories.**

The number of tobacco, cigar, and cigarette factories licensed in 1929-30 was twenty-four, of which twelve were too small to be classified as ordinary factories and were consequently not included in the statistical tabulation on page 418. In the year mentioned the remaining twelve gave employment to 1,475 persons who were paid £322,842 in wages, and used machinery, plant, land and buildings valued at £430,970. The subjoined table shows the quantity of tobacco leaf used by and the output of the full number of licensed establishments for the last ten years:—

. TOBACCO FACTORIES, 1920-21 to 1929-30.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.			
	Australian.	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lbs.	lbs.	lbs.	lbs.	number.	number.
1920-21 ..	751,137	5,290,854	6,443,480	228	35,549,722	109,686,950
1921-22 ..	535,590	5,250,641	6,345,508	232	33,893,695	152,908,600
1922-23 ..	540,322	5,628,555	6,709,060	231	32,699,019	99,771,650
1923-24 ..	471,862	4,998,680	5,833,903	99	29,244,981	87,896,350
1924-25 ..	427,152	5,222,496	5,998,437	50	30,794,864	77,840,200
1925-26 ..	449,575	5,055,260	5,879,683	100	29,595,805	70,135,500
1926-27 ..	527,807	4,662,288	5,520,998	—	27,657,963	70,314,868
1927-28 ..	462,279	4,579,586	5,511,072	—	26,688,939	68,537,354
1928-29 ..	450,083	4,585,040	5,351,643	4,527	24,094,483	96,032,175
1929-30 ..	491,936	4,319,954	5,450,116	—	23,739,045	91,309,252

**Woollen
mills.** There were thirty-one woollen mills working in 1929-30, and the number of persons employed therein was 6,663, of whom fifteen were working proprietors. The wages paid amounted to £1,036,745, and the approximate value of the machinery, plant, land and buildings was £2,971,850. The value of the raw materials used during the year was £1,978,388, and that of the goods manufactured in the same period, £3,903,164. The quantities of wool and cotton used and of goods manufactured in each of the last ten years were as follows:—

WOOLLEN MILLS, 1920-21 to 1929-30.

Year.	Quantity of Scoured Wool Used.	Quantity of Cotton Used.	Goods Manufactured—				Value of Output.
			Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.	
	lbs.	lbs.	yards.	yards.	pairs.	number	£
1920-21	7,702,055	553,282	2,509,198	4,035,298	224,745	47,179	2,397,610
1921-22	8,015,650	586,836	1,872,512	5,759,987	297,700	51,598	2,482,761
1922-23	9,640,760	621,490	1,714,460	6,622,350	314,803	71,073	3,264,025
1923-24	7,936,456	848,812	1,927,298	6,095,442	377,354	115,443	3,561,480
1924-25	8,782,203	544,364	1,898,647	3,594,427	319,026	130,094	3,433,231
1925-26	10,679,901	285,482	3,438,142	3,618,260	250,943	93,766	3,976,224
1926-27	14,510,421	1,013,077	4,854,389	6,213,860	327,113	116,855	4,581,445
1927-28	11,960,882	972,455	6,236,623*	6,879,796*	375,125	126,603	4,680,740
1928-29	11,582,312	832,851	5,979,625*	4,603,874*	285,830	115,533	4,308,677
1929-30	11,708,536	547,307	6,077,129*	3,546,961*	190,869	123,861	3,903,164

* Square yards.

Particulars relating to factories manufacturing boots and shoes are shown in the following table. Figures for the year 1920-21 include boot-repairing establishments.

These were tabulated separately from boot factories in the year 1926-27 and succeeding years. To enable a valid comparison to be made the figures for boot repairing factories are included at the bottom of the table.

Item.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Number of establishments ..	304	204	179	175	175
Number of persons employed ..	9,212	12,192	11,017	11,041	10,321
Horse-power of engines used ..	2,498	3,366	2,821	3,176	3,077
Value of plant, machinery, land, and buildings ..	£ 927,310	£ 1,470,440	£ 1,376,180	£ 1,403,330	£ 1,369,000
Salaries and wages paid ..	£ 1,208,760*	£ 2,140,054	£ 1,906,127	£ 1,939,069	£ 1,834,816
Fuel, light, and power ..	£ 24,568	£ 40,565	£ 34,842	£ 34,654	£ 34,284
Value of materials used ..	£ 2,911,852	£ 3,058,257	£ 2,943,572	£ 3,031,173	£ 2,726,740
Value of output ..	£ 4,964,462	£ 6,105,072	£ 5,657,318	£ 5,810,619	£ 5,375,438
Boots and shoes made .. pairs	5,447,504	8,147,282	7,792,702	7,856,996	7,891,133
Slippers (including canvas) made .. pairs	559,213	2,100,228	2,188,608	2,492,609	2,587,407
<i>Boot Repairing Factories.</i>					
Number of factories ..	†	272	305	340	372
Persons employed ..	†	531	546	567	594
Value of plant, machinery, land, and buildings ..	£ †	£ 414,350	£ 418,310	£ 491,110	£ 495,270
Value of materials used ..	£ †	£ 74,663	£ 84,602	£ 83,955	£ 81,389
Salaries and wages paid ..	£ †	£ 101,738	£ 102,592	£ 116,849	£ 121,037
Value of output ..	£ †	£ 227,636	£ 244,937	£ 253,913	£ 255,528

* Excluding amounts drawn by working proprietors. † Not available.

The decrease in the boot factory figures in the year 1927-28 is largely due to the exclusion of factories making boot accessories.

The value of the output of establishments connected with the manufacture of dress, i.e., clothing, tailoring, dressmaking, millinery, underclothing, hats and caps, &c., but exclusive of boots and shoes, was £15,783,906 in 1929-30, as compared with £12,994,011 in 1920-21. During the period 1920-21 to 1929-30 the persons employed increased by 10 per cent., the wages paid

Dress (exclusive of boot) factories.

by 60 per cent., the value of materials used by 10 per cent., and the value of the output by 22 per cent. Particulars of the industry for each of the last ten years are as follows:—

DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1920-21 to 1929-30.

Year.	Number of Factories.	Number of Persons Employed.			Salaries and Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
					£	£	£
1920-21	1,346	4,383	25,980	30,363	2,872,171	7,804,264	12,994,011
1921-22	1,424	4,674	27,370	32,044	3,328,326	7,689,101	13,429,230
1922-23	1,526	4,951	28,595	33,546	3,554,303	7,456,539	13,354,238
1923-24	1,501	4,751	26,772	31,523	3,574,059	7,181,020	13,118,477
1924-25	1,500	4,823	26,295	31,118	3,837,919*	7,388,950	13,584,190
1925-26	1,491	4,862	26,458	31,320	4,022,168*	7,833,863	14,199,570
1926-27	1,535	5,348	28,941	34,289	4,492,778*	8,530,529	15,517,404
1927-28	1,517	5,241	28,212	33,453	4,493,366*	7,975,259	14,707,061
1928-29	1,522	5,433	28,272	33,705	4,541,295*	8,426,982	15,505,660
1929-30	1,474	5,915	27,631	33,546	4,594,570*	8,602,639	15,783,906

* Including amounts drawn by working proprietors.

Electric light and power works.

Particulars relating to the electric light and power work of the State are given in the next table:—

ELECTRIC LIGHT AND POWER WORKS, 1920-21 to 1929-30.

Year.	Number of Stations.	Horse-power of Machinery.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Supplied.	Value of Output.
			£		£	British units.	£
1920-21	79	54,189	2,660,945	1,242	283,309	115,105,000	1,131,331
1921-22	84	57,481	3,166,750	1,350	334,805	136,021,000	1,407,268
1922-23	88	72,106	4,042,910	1,451	377,048	157,728,000	1,614,139
1923-24	90	154,622	5,864,065	1,752	462,172	405,108,000	2,176,551
1924-25	84	185,633	7,900,455	2,011	549,849	413,556,000	2,382,582
1925-26	83	188,342	5,035,460	1,149	338,807	460,710,000	1,648,113
1926-27	86	219,626	5,144,035	1,120	323,286	580,221,000	1,768,514
1927-28	86	198,914	5,513,630	1,069	307,490	630,880,000	1,566,113
1928-29	87	235,589	6,079,300	1,153	322,295	673,492,000	1,616,076
1929-30	91	248,193	6,559,245	1,230	354,823	724,525,000	1,873,361

The decrease in the number of persons and the value of machinery and plant and output in electric supply undertakings for the last five years is due to a change in the method of compilation. In previous years, the figures related to both generation and distribution, but since 1924-25 only those relating to the former are given.

Prior to 1923-24 particulars relating to the Newport power houses controlled by the Victorian Railways Commissioners and the State Electricity Commission had not been included in the statistics, and this accounts for the large increase in the figures for that year.

The principal generating station is now located at the Electricity Commissioner's works at Yallourn, where 319,404,000 units were generated in the year 1929-30.

STATE ELECTRICITY COMMISSION.

The State Electricity Commission was constituted by the *Electricity Commissioners Act 1918*, as amended by the *State Electricity Commission Act 1920*, the latter providing for the appointment for seven years of a chairman and three commissioners. The Commission's duties cover—

1. Control of generation, supply and use of electricity in Victoria.
2. Investigation, and where practicable development, of all possible sources of power.
3. Promotion of the use of electricity.

The Commission is empowered to erect, acquire and operate electric undertakings and operate any business associated therewith, to supply electricity to corporations and to persons outside areas in which there are existing undertakings, to frame safety regulations and to issue licences for wiremen. It controls its own funds and all officers and employees required for the operation of the Act.

A comprehensive transmission system has been established, based upon the brown coal deposits at Yallourn, where the 75,000-kw. station is being duplicated. Two 132,000-volt lines transmit energy to receiving stations at Richmond and Yarraville. A third station (Thomastown) receives the surplus energy from the Sugarloaf-Rubicon group of hydro-stations (37,000 h.p.) in the north-eastern district. There are two peak load stations in the metropolitan area, viz., Newport "B" and Richmond.

The Commission meets nearly all the energy requirements of the metropolitan area, and serves 180 country centres, over 100 of which had no supply previously. As from 1st July, 1931, it will supervise the operation of the Bendigo and Ballarat undertakings (including tramways) until 1st July, 1934, when it will assume full control.

Particulars in regard to gasworks are given below for each of the last five years.

GASWORKS, 1925-26 to 1929-30.

Year.	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons.	cubic feet.	tons.	£
1925-26 ..	35	933	258,764	422,783	5,801,335,000	273,773	1,433,080
1926-27 ..	33	959	264,918	442,391	5,855,817,000	283,998	1,967,435
1927-28 ..	34	1,013	290,190	437,947	6,326,887,000	291,077	2,077,058
1928-29 ..	35	936	265,536	437,651	6,424,614,000	279,887	2,042,896
1929-30 ..	36	905	261,547	399,182	6,409,110,000	260,437	2,073,435

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 114,947 in 1925-26, 88,601 in 1926-27, 68,567 in 1927-28, 239,928 in 1928-29, and 2,516,029 in 1929-30.

The facilities afforded in the metropolitan area have had the effect of bringing within that area the more important of the manufacturing industries. The distribution of factories by classes between the metropolis and the remainder of the State, for 1920-21 and each of the last three years, is exhibited in the following statement:—

NUMBER AND LOCATION OF FACTORIES.

Class of Industry.	Number of Factories.								
	Metropolis.				Remainder of State.				
	1920-21.	1926-27.	1927-28.	1929-30.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Treating raw material, product of pastoral pursuits, &c.	95	83	83	85	207	160	149	145	149
Treating oils and fats, animal, vegetable, &c.	18	21	19	18	9	10	9	8	8
Processes in stone, clay, glass, &c.	126	168	163	156	82	109	98	95	93
Working in wood	250	336	331	328	330	342	319	300	305
Metal works, machinery, &c.	654	807	819	817	209	216	222	216	205
Connected with food and drink, &c.	271	267	592	581	429	465	665	655	619
Clothing and textile fabrics, &c.	1,361	1,719	1,750	1,803	348	368	358	342	329
Books, paper, printing, &c.	328	410	407	420	155	172	174	174	176
Musical instruments, &c.	15	19	18	20	1	1	1	1	1
Arms and explosives	11	7	7	8	1	1	1	1	1
Vehicles, saddlery, harness, &c.	329	468	465	473	345	481	506	515	548
Ship and boat building and repairing	10	11	10	12	2	2	2	2	2
Furniture, upholstery, and bedding	353	448	445	380	33	48	54	47	45
Drugs, chemicals, and by-products	83	92	98	88	39	22	23	13	14
Surgical and other scientific appliances	32	40	43	42	2	4	3	4	4
Jewellery, time-pieces, and plated-ware	100	112	108	111	7	5	7	8	7
Heat, light, and power	69	26	26	29	111	103	104	105	109
Rubber and Leatherware	53	106	116	126	24	28	30	30	36
Minor wares, &c.	62	18	23	45	3	1	1	2	4
Total	4,220	5,158	5,523	5,542	2,312	2,532	2,722	2,662	2,653

Since 1920-21 the number of factories in the State has increased by 1,663, the greatest numerical increase in the classes being that of the food and drink factories, of which there were 500 more in 1929-30 than in 1920-21. Increase or decrease in the number of factories is not by itself a good indicator of the growth of manufacturing industry, since a lessening of the number by absorption or amalgamation may result in greater economy in manufacture and increased output.

The average number of persons employed in each class of industry is shown in the following table:—

AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

Class of Industry.	1920-21.	1926-27.	1927-28.	1928-29.	1929-30.
Treating raw materials, product of pastoral pursuits, &c. . .	4,045	4,112	3,552	3,198	3,232
Treating oils and fats, animal, vegetable, &c. . .	835	941	870	880	823
Processes in stone, clay, glass, &c. . .	5,486	6,117	5,855	5,576	5,026
Working in wood . . .	9,529	9,134	8,265	6,601	6,509
Metal works, machinery, &c. . .	23,276	28,563	27,819	27,340	25,439
Connected with food and drink, &c. . .	17,673	18,381	21,476	20,934	20,628
Clothing and textile fabrics, &c. . .	44,341	55,101	53,857	53,949	53,115
Books, paper, printing, &c. . .	10,281	11,720	11,618	11,490	11,451
Musical instruments, &c. . .	384	532	471	537	466
Arms and explosives . . .	650	537	511	517	506
Vehicles, saddlery, harness, &c. . .	6,087	8,236	7,845	8,163	7,646
Ship and boat building and repairing . . .	900	388	395	396	385
Furniture, bedding, and upholstery . . .	3,917	5,460	5,199	4,792	4,117
Drugs, chemicals, and by-products . . .	2,564	2,811	2,839	2,791	2,522
Surgical and other scientific appliances . . .	199	269	269	284	246
Jewellery, time-pieces, and plated-ware . . .	1,397	1,044	1,100	1,065	1,077
Heat, light, and power . . .	4,738	2,984	3,029	3,034	3,231
Rubber and Leatherware, n.e.i. . .	1,057	4,496	5,080	4,688	4,143
Minor wares, n.e.i. . .	3,384	313	307	333	447
Total . . .	140,743	161,639	160,357	153,568	151,009

The method of arriving at this average was altered in the year 1928-29, and it is now taken as the average number employed over the whole year, and not, in the case of a seasonal factory working only for a portion of the year, the average for the period of operation.

The table of monthly employment in factories (see page 452) is designed to show seasonal employment.

The total increase in the number of hands employed during the period covered by the above table was 10,266, which represented an advance of about 7 per cent. An increase of 2 per cent. is, however, due to the addition of a new industry in class 6; viz., bakeries (see page 428), included for the first time in 1927-28. The greatest development had taken place in clothing factories, food and drink, and metal works, which showed increases of 8,774, 2,955, and 2,163 respectively in the number of persons employed in 1929-30 as compared with the number in 1920-21. The increase in rubber and leatherware since 1925-26 is mainly due to an alteration in classification by which rubber goods have been transferred from minor wares.

The abnormal increases in 1927-28 in the smaller classes of factories is largely due to the inclusion for the first time of bakeries.

	Showing Annual Percentage Increase or Decrease.									
	1925-26.	Increase.	1926-27.	Increase.	1927-28.	Increase.	1928-29.	Increase.	1929-30.	Increase.
Under 4 hands—		%		%		%		%		%
Number of Factories	1,879	5.15	2,051	9.15	2,397	16.87	2,585	7.84	2,770	7.2
Employees	4,011	3.59	4,315	7.58	5,056	17.17	4,907	2.95	4,940	0.7
4 hands—										
Number of Factories	797	4.32	811	1.76	955	17.75	823	13.82	919	11.7
Employees	3,188	4.32	3,244	1.76	3,820	17.75	3,292	13.82	3,676	11.7
5 to 10 hands—										
Number of Factories	2,210	2.17	2,215	0.22	2,301	3.88	2,241	2.61	2,049	8.6
Employees	15,304	2.56	15,465	1.05	15,861	2.56	15,391	2.96	14,124	8.2
11 to 20 hands—										
Number of Factories	1,142	2.31	1,125	1.49	1,101	2.13	1,035	1.45	1,013	6.2
Employees	16,615	2.65	16,479	0.81	16,160	1.93	15,840	1.98	14,755	6.8
21 to 50 hands—										
Number of Factories	883	2.11	900	1.92	922	2.44	903	2.06	880	2.5
Employees	28,066	2.08	28,774	2.52	28,960	0.64	28,472	1.68	27,232	4.4
51 to 100 hands—										
Number of Factories	303	2.88	340	12.21	320	5.88	300	6.25	309	3.0
Employees	20,838	5.11	24,177	16.02	22,433	7.21	20,953	6.55	21,310	1.7
Over 100 hands—										
Number of Factories	247	6.46	248	0.40	249	0.40	260	4.42	255	1.9
Employees	64,937	1.73	69,185	16.54	68,067	1.61	67,703	0.53	64,972	4.0

[illegible]

Occupations in factories. In the following table the persons employed in factories are grouped according to their occupational status:—

OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Working proprietors ..	7,255	7,254	7,334	7,755	7,302	6,963
Managers, overseers ..	5,043	5,213	5,580	5,891	5,826	5,797
Accountants, clerks ..	6,827	6,034	6,519	6,677	6,847	6,500
Engine-drivers, firemen	2,142	2,065	2,036	1,945	1,850	1,850
Workers in factory or works	128,706	128,948	137,025	135,425	132,304	127,738
Outworkers	728	736	592	380	240	182
Carters, messengers ..	2,766	2,394	2,065	1,703	1,660	1,494
Others	691	315	488	581	539	485
Total ..	154,158	152,959	161,639	160,357	156,568	151,009

Outworkers. The term "outworker" used in the above table relates to factory workers working in their own homes, but does not include individuals working for themselves. The employment of outworkers is regulated by a special provision of the Factories and Shops Act. They are required to register their names and addresses with the Chief Inspector of Factories, and factory proprietors are forbidden to give work to those who are not registered.

Sex distribution in factories. The average numbers of males and females employed in factories and their proportions to the male and female populations, for the years 1920-21 to 1929-30, were as follows:—

EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

Year.	Males.		Females.		Total.	
	Number.	Average per 10,000 of Male Population.	Number.	Average per 10,000 of Female Population.	Number.	Average per 10,000 of Total Population.
1920-21 ..	96,379	1,277	44,364	580	140,743	926
1921-22 ..	97,789	1,279	47,087	599	144,876	934
1922-23 ..	103,092	1,307	49,533	618	152,625	960
1923-24 ..	107,578	1,334	48,584	593	156,162	961
1924-25 ..	105,984	1,286	48,174	578	154,158	930
1925-26 ..	104,512	1,246	48,447	573	152,959	908
1926-27 ..	108,969	1,278	52,670	613	161,639	944
1927-28 ..	108,068	1,246	52,289	598	160,357	921
1928-29 ..	104,648	1,195	51,920	586	156,568	889
1929-30 ..	100,135	1,136	50,874	568	151,009	850

Males formed 68·5 per cent. in 1920-21 and 66·3 per cent. in 1929-30 of the total persons employed. The increase during the period 1920-21 to 1929-30 in the number of males employed was 3,756, or 3·9 per cent., and in the number of females employed, 6,510, or 14·7 per cent.

Of the total females in factories 73·1 per cent. are engaged in the textile and clothing industries, and 10·0 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table:—

FEMALE EMPLOYMENT IN FACTORIES, 1929-30.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Oatmeal, etc.	305	216	70·8
Biscuit	538	511	94·9
Jam, fruit, and vegetable canning	1,062	906	85·3
Confectionery	1,645	1,452	88·3
Tobacco	913	562	61·5
Woollen mills	2,950	3,713	125·9
Clothing, tailoring, etc.	1,926	6,201	322·0
Dressmaking, millinery	508	7,548	1,485·8
Underclothing, shirts, ties, etc.	619	5,864	947·3
Hats, caps, etc.	537	1,162	216·4
Hosiery, knitting	1,824	6,171	338·3
Fur	221	302	136·7
Boots and shoes	5,388	4,933	91·5
Printing, newspapers, etc.	6,254	1,589	25·4
Bookbinding, etc.	697	575	82·5
Paper making, Paper bag, etc.	918	894	97·4
Sail, tent, rope, twine	545	366	67·2
Chemicals	643	583	90·7
Ammunition and Explosives	339	167	49·2
Upholstery, bedding, etc.	617	431	69·9
Match	202	586	290·1
Fancy leather	561	321	57·2
Rubber goods	2,231	1,030	46·2
All other factories	68,692	4,791	7·0
Total	100,135	50,874	50·8

A favorable feature of factory statistics has been the small proportion of children engaged in factories. Of the male and female employees, boys and girls under 16 constituted 3·74 and 7·90 per cent. respectively in 1929-30, as

Child labour
in factories.

against 4.11 and 6.39 per cent. in 1920-21. The number of children employed in factories and their proportions to the total employees are given in the subjoined table for the years 1920-21 to 1929-30 :—

CHILDREN EMPLOYED IN FACTORIES.

Year.	Boys under 16.	Girls under 16.	Total Children.	Proportion per cent. of—		
				Boys to Male Employees.	Girls to Female Employees.	Children to Total Employees.
1920-21 ..	3,715	2,798	6,513	4.11	6.39	4.86
1921-22 ..	3,780	3,120	6,900	4.13	6.71	5.00
1922-23 ..	4,031	3,163	7,194	4.18	6.48	4.95
1923-24 ..	4,057	3,422	7,479	4.03	7.15	5.03
1924-25 ..	4,027	3,223	7,250	4.05	6.78	4.94
1925-26 ..	3,980	3,489	7,469	4.06	7.30	5.13
1926-27 ..	4,567	4,041	8,608	4.46	7.77	5.58
1927-28 ..	4,231	3,992	8,223	3.91	7.63	5.13
1928-29 ..	4,209	4,298	8,507	4.29	8.39	5.70
1929-30 ..	3,748	4,019	7,767	3.74	7.90	5.14

Machinery
in factories.

In the following table are shown the number of factories using mechanical power, the total horse-power of the engines used, and the value of the machinery and plant for the ten years 1920-21 to 1929-30 :—

MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery.	Value of Machinery and Plant.	Horse-power of Engines.
		£	
1920-21	5,161	18,179,385	182,143
1921-22	5,473	21,182,110	191,881
1922-23	5,762	23,994,715	216,427
1923-24	6,030	28,223,915	314,561
1924-25	6,168	32,563,815	374,064
1925-26	6,321	30,549,130	367,318
1926-27	6,637	31,580,350	414,992
1927-28	7,209	32,745,680	403,770
1928-29	7,305	33,724,910	446,382
1929-30	7,419	35,022,535	465,739

The nature of the power used and the capacity of the machinery in the factories of the State are set out in the next table. Establishments using more than one kind of mechanical power are included once only in the upper half of the table, usually under the power which is principally used. The lower half of the table shows the total horse-power of engines used.

POWER USED IN FACTORIES, 1920-21 TO 1929-30.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water, Wind, or Horses.	Manual Labour.
1920-21 ..	941	705	3,128	360	27	1,371
1921-22 ..	935	666	3,474	364	34	1,280
1922-23 ..	910	655	3,795	372	30	1,334
1923-24 ..	885	540	4,174	402	29	1,259
1924-25 ..	812	476	4,448	403	29	1,257
1925-26 ..	736	413	4,709	432	31	1,140
1926-27 ..	678	334	5,141	467	17	1,053
1927-28 ..	618	334	5,701	509	12	1,036
1928-29 ..	579	278	5,941	493	14	892
1929-30 ..	539	223	6,142	490	25	776

Year.	Actual Horse-power of Engines.				
	Steam.	Gas.	Electricity.	Oil.	Total.
1920-21 ..	103,048	19,331	56,602	3,162	182,143
1921-22 ..	106,882	19,327	62,663	3,009	191,881
1922-23 ..	112,547	18,968	81,679	3,233	216,427
1923-24 ..	195,744	18,394	95,340	5,083	314,561
1924-25 ..	233,290	17,869	97,381	5,380	353,920
1925-26 ..	235,872	15,422	107,812	8,212	367,318
1926-27 ..	268,061	13,548	123,359	10,024	414,992
1927-28 ..	241,956	12,326	137,692	11,796	403,770
1928-29 ..	*274,331	10,886	147,835	13,330	446,382
1929-30 ..	†286,164	9,671	155,911	13,993	465,739

* Includes 26,265 horse-power generated by water.

† Includes 26,546 horse-power generated by water.

The predominance of steam is due to its extensive use for the generation of electricity. A consistent increase is shown in the use of electricity which, as a secondary power, should be deducted from the total if the nett horse-power used in factory production is required.

Wages in
Factories.

The total amount and the average amount of salaries and wages paid to persons employed in factories are given in the following table for each of the last ten years :—

SALARIES AND WAGES PAID IN FACTORIES.

Year.	Drawings by Working Proprietors (excluding Profits).		Salaries paid to Managers and Clerks.		Wages paid to Factory Workers.		Total Salaries and Wages paid.
	Males.	Females.	Males.	Females.	Males.	Females.	
Aggregate Amounts.							
1920-21	£	£	£	£	£	£	£
1921-22	..	..	2,384,372	310,024	15,284,545	3,398,275	21,377,216
1922-23	..	..	2,563,467	357,691	16,933,984	3,991,353	23,846,495
1923-24	..	..	2,761,045	394,366	18,038,101	4,353,680	25,547,192
1924-25	..	..	3,003,855	436,425	19,577,822	4,453,982	27,472,084
1924-25	1,538,868	74,043	3,055,257	443,676	19,460,304	4,484,904	29,057,052
1925-26	1,590,771	80,876	2,996,929	448,387	19,547,974	4,664,463	29,829,400
1926-27	1,887,094	95,938	8,268,208	495,735	20,931,037	5,194,577	31,822,589
1927-28	1,954,086	102,663	3,353,582	582,265	20,915,338	5,229,167	32,087,051
1928-29	1,965,990	100,829	3,416,012	552,056	20,268,582	5,230,117	31,538,586
1929-30	2,032,445	97,250	3,395,311	554,149	19,293,295	5,145,085	30,517,535
Average Amounts.							
1920-21	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1921-22	..	..	298 19 7	124 15 2	185 12 4	82 5 11	159 8 4
1922-23	..	..	316 18 11	133 16 4	202 19 11	91 2 11	172 16 9
1922-23	..	..	331 10 9	134 14 8	204 12 2	94 16 5	175 15 9
1923-24	..	..	339 19 1	142 13 5	212 19 0	99 7 1	184 15 11
1924-25	233 8 11	111 13 7	347 18 0	143 13 7	214 15 5	100 19 4	186 16 4
1925-26	240 18 4	124 4 8	363 7 11	149 9 3	213 0 4	104 2 6	189 16 5
1926-27	275 18 6	141 18 5	369 19 2	151 16 8	223 18 1	106 12 0	193 14 1
1927-28	278 14 11	137 16 0	387 14 4	154 7 7	227 11 3	108 14 5	196 15 9
1928-29	298 15 8	139 13 0	374 11 3	155 7 7	227 17 5	109 15 5	197 8 3
1929-30	321 1 8	153 12 8	386 10 8	157 14 10	226 18 6	110 2 2	197 1 6

* These figures are based on the number of employees and the wages, etc., paid to them, working proprietors being excluded.

The particulars appearing in the above table reveal continued increases from year to year in the average earnings of all groups with the exception of male factory workers, whose average wage for the year 1929-30 decreased by 18s. 11d. In the average wage of all employees, the largest increase was from the year 1920-21 to 1921-22. The figures for the year 1929-30 show a decrease of 6s. 9d. in the average wage paid per employee.

The method of arriving at the average number of employees since the year 1928-29 (see page 437) would tend to increase the average wage paid to an amount slightly greater than that in previous years.

The average wage for 1929-30 (£197 1s. 6d.) was probably below the average according to the determinations of Wages Boards, and would be mainly accounted for by the fact that the former sum is based on the actual payments to workers, while the latter represents the

average of the sums to which they would have been entitled if they had worked throughout the whole year. There is, of necessity, a difference between the two averages, as all hands are not continuously employed, nor are all factories working throughout the whole year.

The cost of production and the value of the output in each class of manufacturing industry during the year 1929-30 are given in the subjoined statement:—

FACTORY COSTS AND OUTPUT, 1929-30.

Class of Industry.	Cost of—				Value of Output.
	Raw Materials Used (including Containers).	Fuel, Light, and Power Used.	Salaries and Wages Paid.	Tools replaced, Repairs to Plant, Oil and Water Used.	
	1.	2.	3.	4.	5.
	£	£	£	£	£
Treating raw material, product of pastoral pursuits, &c. . .	2,997,212	93,091	799,150	42,772	4,435,297
Treating oils and fats, animal, vegetable, &c. . .	832,075	45,072	179,681	20,893	1,446,181
Processes in stone, clay, glass, &c. . .	870,358	485,116	1,204,146	111,145	3,552,685
Working in wood . . .	1,685,714	47,457	1,546,277	50,315	4,010,961
Metal works, machinery, &c. .	6,560,851	364,740	6,012,903	186,138	15,460,865
Connected with food and drink, &c. .	28,005,403	745,628	4,699,591	243,019	39,257,923
Clothing and textile fabrics, &c. .	14,319,783	334,893	7,954,511	215,559	26,948,594
Books, paper, printing, &c. . .	2,775,995	146,178	2,599,364	68,383	6,975,549
Musical instruments, &c. . .	133,309	3,463	106,291	784	310,518
Arms and explosives . . .	243,269	19,199	117,648	16,412	495,980
Vehicles, saddlery, harness, &c. .	865,103	62,507	1,752,662	41,434	3,299,511
Ship and boat building and repairing . . .	45,797	3,924	99,373	1,591	176,756
Furniture, upholstery, and bedding . . .	1,282,990	27,098	828,754	11,920	2,527,840
Drugs, chemicals, and by-products . . .	1,971,762	62,341	579,688	85,763	3,648,944
Surgical and other scientific instruments . . .	42,711	1,701	56,717	1,390	131,503
Jewellery, time-pieces, and plated-ware . . .	218,915	9,011	218,853	3,185	552,078
Heat, light, and power . . .	1,829,255	859,168	826,093	143,257	5,445,617
Rubber and leatherware, n.e.i. . .	1,906,774	117,689	846,865	96,670	3,786,670
Minor wares, n.e.i. . .	182,526	7,431	88,968	5,072	347,627
Total . . .	66,770,302	3,435,727	30,517,535	1,845,702	122,811,099

The difference between the sum of the first four columns and the last column represents the amount available for miscellaneous expenses, interest, and profit. The proportions which this margin

and the chief items of the cost of production bear to the total value of production in each class of industry are shown in the following table:—

PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION
IN FACTORIES, 1929-30.

Class of Industry.	Percentage of Costs, &c., to Total Value of Production.				
	Materials Used, including Containers.	Fuel, Light, &c.	Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expendi- ture, Interest and Profit.
	%	%	%	%	%
1. Treating raw material, product of pastoral pur- suits, &c.	67·6	2·1	18·0	1·0	11·3
2. Treating oils and fats, animal, vegetable, &c.	57·6	3·1	12·4	1·4	25·5
3. Processes in stone, clay, glass, &c.	24·5	13·7	33·9	3·1	24·8
4. Working in wood	42·0	1·2	38·5	1·3	17·0
5. Metal works, machinery, &c.	42·4	2·4	38·9	1·2	15·1
6. Connected with food and drink, &c.	71·3	1·9	12·0	0·6	14·2
7. Clothing and textile fabrics, &c.	53·1	1·3	29·5	0·8	15·3
8. Books, paper, printing, &c.	39·8	2·1	37·2	1·0	19·9
9. Musical instruments, &c.	43·1	1·1	34·2	0·3	21·3
10. Arms and explosives	49·0	3·9	23·7	3·3	20·1
11. Vehicles, saddlery, harness, &c.	26·2	1·9	53·1	1·3	17·5
12. Ship and boat building and repairing	25·9	2·2	56·2	0·9	14·8
13. Furniture, upholstery, and bedding	50·7	1·1	32·8	0·5	14·9
14. Drugs, chemicals, and by- products	54·0	1·7	15·9	2·4	26·0
15. Surgical and other scientific instruments	32·5	1·3	43·1	1·1	22·0
16. Jewellery, time-pieces, and plated-ware	39·7	1·6	39·6	0·6	18·5
17. Heat, light, and power	33·6	15·8	15·2	2·6	32·8
18. Rubber and leatherware, n.e.i.	50·3	3·1	22·4	2·6	21·6
19. Minor wares, n.e.i.	52·5	2·1	25·6	1·5	18·3
Total	51·4	2·8	24·8	1·1	16·9

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to present the raw material in its manufactured form. Thus in class three the sum paid in wages represents 34 per cent. and the cost of raw materials 25 per cent. of the value of the finished article, whilst in class six the expenditure on wages amounts to 12 per cent. and that on raw materials to 71 per cent. of the value of the output.

Cost of
production,
1920-21 to
1929-30.

In the next table the cost of production, the value of the output of factories, and the balance available for profit and miscellaneous expenses are compared for the years 1920-21 to 1929-30:—

**COST OF PRODUCTION AND VALUE OF OUTPUT OF
FACTORIES, 1920-21 to 1929-30.**

Year.	Cost of Production.				Total Value of Output.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	All other Expenditure, Interest, and Profit.	
	£	£	£	£	£
1920-21 ..	65,401,425	2,184,096	21,377,216	17,045,557	106,008,294
1921-22 ..	60,352,561	2,329,760	23,846,495	19,714,365	106,243,181
1922-23 ..	62,658,163	2,443,681	25,547,192	20,637,307	111,286,343
1923-24 ..	62,217,874	2,803,239	27,472,084	21,428,730	113,921,927
1924-25 ..	65,205,233	2,964,635	29,057,052	20,950,478	118,177,398
1925-26 ..	67,164,445	3,156,382	29,329,400	20,336,212	119,986,439
1926-27 ..	69,816,935	3,392,448	31,822,589	22,365,979	127,397,951
1927-28 ..	69,637,778	3,433,923	32,087,051	23,306,565	128,465,317
1928-29 ..	70,100,456	3,361,298	31,533,586	22,902,123	127,897,463
1929-30 ..	66,770,302	3,435,727	30,517,535	22,087,535	122,811,099

These figures are reduced in the succeeding statement to their proportionate value of the total output.

**PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES,
1920-21 to 1929-30.**

Year.	Proportion of Outlay to Output.				Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Other Expenditure, Interest, and Profit.	
	%	%	%	%	%
1920-21 ..	61·7	2·0	20·2	16·1	100·0
1921-22 ..	56·8	2·2	22·4	18·6	100·0
1922-23 ..	56·3	2·2	23·0	18·5	100·0
1923-24 ..	54·6	2·5	24·1	18·8	100·0
1924-25 ..	55·2	2·5	24·6	17·7	100·0
1925-26 ..	56·0	2·6	24·4	17·0	100·0
1926-27 ..	54·8	2·7	25·0	17·5	100·0
1927-28 ..	54·2	2·7	25·0	18·1	100·0
1928-29 ..	54·8	2·6	24·7	17·9	100·0
1929-30 ..	54·4	2·8	24·8	18·0	100·0

The apparent decrease since 1923-24 in the percentage available for profit and miscellaneous expenses, as shown in the last table, is largely accounted for by the fact that the amount of salaries and wages includes for those years the sums drawn regularly by working

proprietors amounting in the successive years to £1,612,911, £1,671,647, £1,933,032, £2,056,699, £2,066,819, and £2,129,695.

The ratio of salaries and wages to the value of the output of factories was 24·8 per cent. on the average of the last five years, as against 22·9 per cent. in the period 1920-21 to 1924-25. The cost of materials was 54·8 per cent. of the value of output in the period 1925-26 to 1929-30, as compared with 56·8 per cent. in the years 1920-21 to 1924-25. The proportionate outlay on fuel, light, and power was 2·3 per cent. in the earlier and 2·7 per cent. in the later period. The balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £17 14s. 4d. in every £100 of the total output value in the period 1925-26 to 1929-30, as compared with £17 19s. 2d. in the preceding five-year period.

Capital
invested in
manufacturing
plant and
premises.

In the following statement the amount of capital invested in machinery and plant and land and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1929-30 :—

MACHINERY, PLANT, LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1929-30.

Class of Industry.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
Treating raw material, product of pastoral pursuits, &c.	657,120	873,740
Treating oils and fats, animal, vegetable, &c.	313,695	273,515
Processes in stone, clay, glass, &c.	1,277,290	1,251,135
Working in wood	1,030,225	1,069,070
Metal works, machinery, &c.	4,247,865	5,141,345
Connected with food and drink, &c.	6,475,895	7,449,105
Clothing and textile fabrics, &c.	4,440,205	7,592,185
Books, paper, printing, &c.	2,743,925	3,126,735
Musical instruments, &c.	56,955	166,800
Arms and explosives	315,425	454,230
Vehicles, saddlery, harness, &c.	1,025,460	2,676,300
Ship and boat building and repairing	110,150	193,115
Furniture, upholstery, and bedding	280,655	989,835
Drugs, chemicals, and by-products	1,253,655	1,184,785
Surgical and other scientific instruments	24,645	101,505
Jewellery, time-pieces, and plated-ware	71,695	282,015
Heat, light, and power	9,320,145	2,871,300
Rubber and Leatherware, n.e.i.	1,306,610	1,151,685
Minor wares, n.e.i.	70,920	140,085
Total	35,022,535	36,988,485

The capital invested in plant, buildings, &c., used in connexion with three classes of industries—food and drink; clothing and textile fabrics; and heat, light and power—amounted, in the year under review, to £38,148,835, or more than one-half of the total for all manufacturing industries.

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries are shown in the next table for the years 1920-21 to 1929-30 :—

**MACHINERY, PLANT, LAND AND BUILDINGS USED IN
MANUFACTURING INDUSTRIES, 1920-21 to 1929-30.**

Year.						Value of Machinery and Plant.	Value of Land and Buildings.
						£	£
1920-21	..	..	..	..	..	18,179,385	17,313,350
1921-22	..	..	..	..	..	21,182,110	19,810,170
1922-23	..	..	..	..	..	23,994,715	22,428,525
1923-24	..	..	..	..	..	28,223,915	24,972,560
1924-25	..	..	..	..	..	32,563,815	28,468,160
1925-26	..	..	..	..	..	30,549,130	29,847,370
1926-27	..	..	..	..	..	31,580,350	32,269,655
1927-28	..	..	..	..	..	32,745,680	34,761,340
1928-29	..	..	..	..	..	33,724,910	36,184,460
1929-30	..	..	..	..	..	35,022,535	36,988,485

It will be seen from these figures that the values of machinery and plant and land and buildings increased by 103 per cent. between 1920-21 and 1929-30.

In the appended table the number of accidents in factories is given for the last ten years. The particulars in the table relate to establishments which came within the scope of the Factories Acts in force in the years specified, and not to those classified for statistical purposes in the preceding tables.

The large increase shown in the number of accidents since 1919 is mainly attributable to an amendment of the law, which made compulsory the reporting of accidents. Previously, only those of a serious nature were reported.

ACCIDENTS IN FACTORIES, 1919 to 1929.

Year.						Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1919	..	..	..	..	..	116,369	362	311
1920	..	..	..	..	..	116,846	862	737
1921	..	..	..	..	..	117,633	830	705
1922	..	..	..	..	..	126,630	787	621
1923	..	..	..	..	..	128,915	1,034	802
1924	..	..	..	..	..	129,147	1,052	814
1925	..	..	..	..	..	128,013	996	778
1926	..	..	..	..	..	135,510	1,252	924
1927	..	..	..	..	..	136,022	1,348	991
1928	..	..	..	..	..	137,244	1,224	891
1929	..	..	..	..	..	136,025	1,129	829

Manufactures— The foregoing tables do not include particulars relating to work of various kinds done by the Penal Department at Pentridge and the Royal Victorian Institute for the Blind. **Penal Department and Blind Institute.** At the former establishment the manufacture of wire netting, clothing, brushware, boots, mats, blankets, flannel, underclothing, and printing are carried on. The estimated value of the output for 1929-30 was £67,503, and of the materials used, £52,330. The articles produced are used principally by Government Departments. The work carried on by the latter is the manufacture of brushware, basketware, mats and matting, and knitted goods, and gives employment to 153 persons (135 males and 18 females). The value of the work turned out for the period under review was £31,802.

Value of Victorian production. The value of all articles produced or manufactured in Victoria has been compiled from actual returns or estimates in the office of the Government Statist, and the results are set forth in the following table:—

VALUE OF VICTORIAN PRODUCTION, 1925-26 to 1929-30.

Produce.	Value in—				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
<i>Cultivation.</i>	£	£	£	£	£
Wheat	6,665,150	9,546,812	4,724,369	8,364,675	3,559,063
Oats	684,320	653,291	688,804	627,521	554,547
Barley, malting ..	202,206	192,349	184,824	151,726	203,999
" other	87,960	103,390	112,503	70,778	96,203
Maize	172,825	152,055	121,368	136,067	112,686
Other Cereals ..	58,525	58,488	48,995	36,000	45,111
Grass and Clover					
Seed	2,749	2,350	2,076	9,380	9,636
Potatoes	1,309,470	671,673	388,537	1,189,349	691,273
Onions	267,793	110,839	188,186	187,233	74,704
Other Root Crops ..	18,297	15,161	14,759	13,163	10,983
Hay	3,497,253	4,719,925	3,683,272	3,502,862	2,998,282
Straw	63,988	47,970	66,904	49,427	53,710
Green Forage* ..	539,365	436,205	474,475	535,755	846,265
Tobacco	47,160	57,700	35,280	39,510	54,660
Grapes, not made into wine, raisins, &c. ..	77,333	74,889	81,421	50,813	31,038
Raisins, ordinary ..	73,452	99,080	76,100	82,873	96,451
" sultanas ..	676,965	1,195,183	623,241	857,975	797,736
Currants	93,972	182,536	152,171	273,186	186,406
Wine	177,371	254,184	152,212	84,239	82,182
Hops	54,193	16,074	50,262	36,800	38,120
Other Crops	125,788	109,022	168,618	119,397	144,663
Fruit grown for sale in orchards and gardens ..	1,247,723	970,831	1,189,356	1,093,434	927,723
Fruit in private orchards and gardens ..	12,070	9,570	10,520	8,500	9,100
Market Gardens ..	830,450	887,550	949,200	931,500	1,060,500
Less Deductions ..	-3,283,560	-4,822,130	-5,616,588	-4,087,508	-3,699,467
Total	13,702,818	15,744,992	8,570,865	14,364,655	8,985,524

* Exclusive of area under sown grasses.

VALUE OF VICTORIAN PRODUCTION, 1925-26 TO 1929-30—continued.

Produce.	Value in—				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	£	£	£	£	£
<i>Dairying and Pastoral.</i>					
Milk consumed in natural state ..	2,333,000	2,326,800	2,184,900	2,025,300	1,858,000
Butter made ..	6,182,120	6,233,400	6,675,700	7,682,200	6,901,330
Cheese made ..	227,660	270,620	244,140	325,600	378,500
Cream made (not for butter) ..	184,350	154,880	174,610	212,800	227,470
Condensed, Concentrated, and Powdered Milk ..	1,437,660	1,498,060	1,906,720	1,713,600	1,557,880
Cattle ..	3,707,000	2,380,830	3,308,880	4,203,500	4,157,000
Pigs ..	1,720,740	1,843,760	1,189,410	1,622,700	1,602,200
Sheep (without wool) ..	3,816,680	2,585,770	3,740,310	3,468,000	3,815,000
Wool ..	7,082,820	7,876,683	9,701,660	10,252,002	5,694,019
Less Deductions ..	-1,771,800	-2,340,426	-2,701,730	-2,368,239	-2,555,965
Total ..	24,420,210	22,280,367	26,424,600	29,137,413	23,135,434
<i>Mining.</i>					
Gold ..	200,958	208,778	163,699	144,068	111,609
Coal ..	762,521	846,697	982,533	933,408	991,422
Stone from Quarries (including limestone) ..	666,765	700,200	652,800	602,900	624,613
Other Metals and Minerals ..	37,284	124,567	156,246	113,765	105,602
Total ..	1,667,528	1,880,242	1,955,278	1,794,141	1,833,246
<i>Forest Produce.</i>					
Timber (Forest Saw-mills only) ..	711,970	863,493	782,700	676,200	681,625
Firewood (estimated) ..	1,071,000	888,400	910,000	939,000	936,400
Bark for Tanning ..	129,490	136,906	107,700	98,380	86,589
Total ..	1,912,460	1,888,799	1,800,400	1,713,580	1,704,614
<i>Miscellaneous.</i>					
Honey and Beeswax ..	41,694	47,282	60,140	82,854	60,125
Poultry production (estimated) ..	4,515,400	4,819,500	4,760,000	4,295,000	4,638,000
Rabbits and Hares ..	697,665	508,340	679,230	820,320	609,470
Fish ..	187,851	167,461	185,840	173,870	223,587
Total ..	5,442,610	5,542,583	5,685,210	5,372,544	5,531,182
Total Value of Primary Products ..	47,145,626	47,336,983	44,436,353	52,382,333	41,190,000
Manufacturing—Added Value* ..	46,006,461	51,005,430	51,565,291	51,062,027	49,403,185
Grand Total ..	93,152,087	98,342,413	96,001,644	103,444,360	90,593,185

* Exclusive of value of output of butter and cheese factories, and forest saw-mills (as regards Victorian timber), which is included above under the headings "Dairying and Pastoral" and "Forest Produce," respectively.

Deductions made from the total value of "Cultivation" include cost of freight and handling charges, together with cost of bags, seed, manure, spraying material, and fodder used in the production of crops.

In the case of "Dairying and Pastoral" production the deductions consist of cost of freight, handling charges, and wool packs, and the value of hay, bran and pollard, green fodder, and root crops used as fodder.

The inclusion of bakeries resulted in an increase in added value in manufacturing of £1,251,524 in 1927-28, of £1,334,716 in 1928-29, and of £1,225,275 in 1929-30, for which allowance must be made when comparing the figures for the last three years with those of previous years.

The values of different kinds of production per head of the total population in each of the last five years were as follows:—

VALUE OF PRODUCTION PER HEAD OF POPULATION,
1925-26 TO 1929-30.

Produce.	Value of Produce per head in—				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivation ..	8 2 9	9 4 0	4 18 5	8 3 2	5 1 1
Dairying and Pastoral	14 10 0	13 0 4	15 3 6	16 10 11	13 0 5
Mining	0 19 10	1 1 11	1 2 5	1 0 4	1 0 8
Forest	1 2 8	1 2 1	1 0 8	0 19 6	0 19 2
Miscellaneous ..	3 4 8	3 4 9	3 5 4	3 1 0	3 2 3
Total Primary Production	27 19 11	27 13 1	25 10 4	29 14 11	23 3 7
Manufactures ..	27 6 5	29 15 11	29 12 3	28 19 11	27 16 0
Grand Total	55 6 4	57 9 0	55 2 7	58 14 10	50 19 7

Monthly
employment
in factories.

Factory schedules for the year 1929-30 included in the on factory pay-rolls on pay days nearest the 15th day carters and messengers and all others engaged in work con-

The information received has been tabulated and the monthly

MONTHLY EMPLOYMENT

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Aerated waters	627	653	699	745
Agricultural implements	2,746	2,626	2,700	2,610
Aircraft building	91	94	97	101
Arms and ammunition	158	152	150	154
Art metal works	149	152	152	147
Bacon	530	496	497	511
Bakeries	2,422	2,457	2,483	2,513
Bags and sacks	113	117	117	117
Basket, wickerware	162	169	181	188
Bedding, upholstery	829	814	822	817
Biscuits	987	986	992	1,024
Boiling down, bone mills	283	284	285	288
Bookbinding	1,246	1,236	1,249	1,257
Boot accessories	430	434	434	425
Boots and shoes	9,757	9,868	10,376	10,883
Boot repair	281	281	283	286
Boxes and cases	379	386	387	386
Brass and copper	1,092	1,143	1,168	1,158
Breweries	1,128	1,128	1,118	1,150
Bricks	868	933	994	1,020
Brooms and brushware	262	265	264	265
Butter, cheese, &c.	2,236	2,255	2,395	2,593
Chaffcutting	325	339	351	336
Cement and cement goods	835	892	905	913
Chemical fertilizers	779	734	759	757
Chemicals, drugs	1,226	1,243	1,279	1,288
Clothing	7,637	7,790	7,921	8,076
Coachbuilding	1,298	1,297	1,311	1,324
Confectionery	3,038	2,939	2,951	3,096
Condiments, coffee, &c.	627	644	646	665
Cooperage	261	256	264	268
Cornflour, oatmeal, &c.	529	543	532	525
Cotton mills	499	498	526	535
Cutlery	119	117	116	113
Diesinking	149	151	146	144
Distilleries	149	168	121	106
Docks and slips	267	284	298	273
Dressmaking	7,526	7,804	8,018	8,037
Dried fruit	332	316	270	293
Dyeworks	370	368	376	386
Electric light and power	1,191	1,179	1,227	1,231
Electrical apparatus	1,374	1,397	1,366	1,335
Electroplating	577	579	558	562
Engineering	5,363	5,560	5,694	5,582

particulars to be furnished data relating to the number of employees of each month, including managers, clerks, engine-drivers, operatives, connected with manufacturing.

totals for each industry are set out in the following table :—

IN FACTORIES, 1929-30.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
756	817	858	918	785	618	573	531
2,694	2,554	2,627	2,621	2,474	2,406	2,458	2,582
96	97	98	99	99	99	98	96
146	148	147	150	148	142	138	141
152	152	150	151	151	141	122	115
520	541	521	519	528	532	532	527
2,514	2,520	2,492	2,494	2,493	2,480	2,474	2,464
117	108	110	109	114	113	119	112
198	196	191	185	164	148	98	134
840	842	812	824	813	790	761	699
1,071	1,114	1,049	1,064	1,039	1,043	1,025	975
287	283	281	281	282	265	262	254
1,257	1,258	1,239	1,240	1,221	1,209	1,219	1,213
422	401	393	428	411	404	383	368
10,971	9,506	8,101	9,621	9,961	9,647	9,278	9,032
287	283	281	284	285	288	286	284
398	417	408	423	416	407	374	371
1,144	1,192	1,112	1,058	1,018	959	904	857
1,191	1,211	1,196	1,195	1,178	1,161	1,115	1,111
962	991	931	943	961	923	708	619
262	269	258	258	259	251	257	257
2,643	2,601	2,473	2,353	2,251	2,189	2,052	1,954
329	348	375	396	394	381	375	367
921	771	845	832	882	723	677	676
765	747	770	804	1,278	1,067	851	653
1,304	1,265	1,204	1,186	1,189	1,180	1,179	1,183
8,124	8,087	7,470	7,557	7,584	7,561	7,317	6,998
1,331	1,337	1,294	1,291	1,237	1,212	1,186	1,161
3,125	3,133	2,848	2,963	2,784	2,910	3,026	3,021
653	653	632	636	605	632	642	636
263	270	261	262	259	242	244	241
515	501	482	481	491	509	531	531
525	531	538	543	541	518	486	517
114	113	111	113	113	119	118	110
146	146	147	152	151	150	149	146
103	100	69	111	126	134	133	146
252	277	294	266	277	267	259	263
7,994	7,578	6,954	7,569	7,791	7,391	7,261	6,803
292	265	295	424	975	1,076	798	488
397	387	388	403	395	399	391	367
1,230	1,235	1,246	1,253	1,216	1,236	1,243	1,250
1,353	1,360	1,408	1,428	1,431	1,558	1,553	1,463
585	596	531	531	520	539	546	545
5,531	5,486	5,532	5,468	5,334	5,099	4,941	4,956

MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Explosives	352	358	358	357
Fancy leather (see leather belting)				
Fellmongeries	425	405	408	543
Flour mills	893	871	850	811
Forest sawmilling	1,739	1,819	1,866	1,885
Furnishing, drapery	188	197	185	194
Furniture, cabinet	2,247	2,240	2,274	2,328
Furriers	399	405	410	413
Gas	970	966	898	926
Glass	762	891	956	925
Hats and caps	1,658	1,708	1,708	1,682
Ice refrigerating	156	167	174	205
Inks, polishes, &c.	294	300	304	301
Ironworks and foundries	4,126	4,174	4,230	4,221
Jam, fruit preserving	1,063	1,059	1,071	1,134
Jewellery	396	409	418	433
Joinery, sawmilling	3,377	3,446	3,465	3,487
Knitting, hosiery	7,265	7,328	7,404	7,564
Leather belting, fancy leather	687	678	684	685
Lime	151	141	134	131
Malt	322	319	321	321
Margarine	57	54	58	57
Matches	726	732	729	750
Meat preserving	594	790	965	1,427
Meters	280	279	284	265
Metallurgical	30	34	35	33
Metal works, other	379	371	387	378
Modelling, plaster sheets	575	559	581	573
Monumental	413	425	432	442
Motor body building	1,851	1,848	1,978	2,055
Motor repairs, assembling	3,552	3,509	3,558	3,681
Musical instruments	488	489	484	481
Nails	176	180	177	175
Newspapers	2,057	2,075	2,112	2,090
Optical and scientific instruments	132	129	127	127
Oil and grease	162	180	176	182
Paper, paper bags	1,785	1,787	1,832	1,843
Paints and varnishes	96	94	95	95
Perambulators	135	132	133	136
Photo engraving	316	315	316	327
Pickles, sauces, vinegar	285	251	277	282
Picture framing	74	73	74	72
Pipes and pottery	728	739	753	750
Printing	5,238	5,275	5,325	5,372
Railway workshops	7,004	6,988	6,863	6,604
Rope, cordage	721	715	713	699
Rubber goods	3,416	3,337	3,456	3,545
Saddlery, harness	123	128	120	123
Sail, tent, tarpaulin	209	210	204	216
Sausage skins	204	244	230	313

FACTORIES, 1929-30—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
356	357	350	353	357	358	358	360
623	405	386	421	391	366	387	410
782	890	1,022	924	881	843	859	832
1,934	1,928	1,727	1,652	1,602	1,422	1,341	1,345
191	198	198	201	203	205	201	192
2,351	2,359	2,289	2,223	2,175	2,015	1,958	1,841
413	427	451	511	511	510	510	464
904	909	908	899	888	886	884	887
934	889	793	696	711	730	763	733
1,715	1,645	1,638	1,668	1,620	1,484	1,569	1,648
230	241	257	270	244	187	161	153
307	317	304	307	305	300	298	283
4,018	3,942	3,790	3,819	3,726	3,622	3,495	3,397
1,196	1,456	2,807	3,346	3,669	3,515	2,006	1,204
443	447	435	410	400	386	390	362
3,497	3,494	3,258	3,147	2,956	2,687	2,555	2,426
7,534	7,666	7,813	8,190	8,265	8,179	8,148	8,025
737	751	737	757	756	753	661	626
123	116	129	135	117	106	107	86
324	315	255	222	214	264	303	299
59	59	56	56	56	56	61	57
769	781	790	792	819	861	856	842
1,468	1,149	896	1,004	715	732	580	443
263	259	255	248	237	229	326	222
34	35	36	36	36	36	35	34
381	391	383	383	374	353	351	341
588	586	555	524	535	476	459	434
445	455	430	438	445	403	402	394
2,029	1,927	1,899	1,683	1,747	1,669	1,631	1,505
3,631	3,660	3,470	3,564	3,479	3,366	3,216	3,137
464	462	424	447	428	425	416	426
171	162	175	171	165	149	153	149
2,092	2,118	2,092	2,094	2,092	2,076	2,066	2,050
131	123	126	126	126	127	125	123
162	163	175	173	162	149	123	119
1,851	1,842	1,816	1,713	1,672	1,729	1,716	1,659
99	99	99	95	88	85	81	83
137	139	130	124	122	119	117	114
326	327	333	330	320	316	308	288
259	268	286	294	316	304	308	280
74	71	68	71	68	70	70	71
755	745	756	753	744	718	694	678
5,379	5,305	5,200	5,206	5,195	5,142	5,162	5,091
6,439	6,395	6,317	6,284	6,236	6,191	6,151	6,147
682	632	613	647	668	663	722	727
3,363	3,299	3,160	3,266	3,287	3,116	2,623	2,421
106	116	123	130	121	116	114	109
215	227	220	215	210	201	194	194
327	299	263	273	235	239	203	195

MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	September.	October.
Shirts, ties, scarves	2,500	2,576	2,645	2,738
Soap and candle	663	659	644	656
Stoves, ovens	412	424	441	454
Surgical instruments	96	95	94	91
Tanneries	1,862	1,894	1,887	1,858
Tinsmithing	1,975	1,997	2,010	2,106
Tiles	476	498	543	566
Tobacco	1,445	1,460	1,456	1,445
Umbrella	129	123	119	125
Underclothing, corset	3,564	3,741	3,841	3,960
Waterproof clothing	204	213	236	234
Wireworking	402	404	410	417
Woodturning	509	506	535	517
Woollen mills	6,780	6,709	6,667	6,645
Window blinds	40	39	42	42
Others	1,203	1,261	1,278	1,347

BUILDING STATISTICS, 1929-30.

In view of the great importance of statistics of building and construction, their collection was undertaken in Victoria in 1929. Owing, however, to the obvious incompleteness of the returns received, the information obtained was not considered satisfactory, and very few details were published. The data received from builders covering their operations for the year ended 30th June, 1930, showed evidence of much greater care in compilation, and are considered worthy of publication in full detail.

The particulars given below are derived from an analysis of figures supplied by 1,050 builders. The results of the tabulation when compared with somewhat similar data obtained from an independent source indicate that the field of inquiry has been fairly completely covered.

The value of building work done in each of the past two years, according to the returns received, is as follows:—

VALUE OF BUILDING WORK.

	1928-29.	1929-30.
	£	£
New buildings	5,747,671	5,025,237
Repairs and additions	519,243	1,041,503
Other construction .. .. .	..	235,328
Total	6,266,914	6,302,068

FACTORIES, 1929-30—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
2,757	2,676	2,557	2,570	2,485	2,355	2,344	2,314
639	654	606	633	633	645	637	622
433	431	432	425	415	375	376	356
93	93	90	91	89	88	86	87
1,827	1,670	1,703	1,835	1,816	1,727	1,649	1,586
2,105	2,168	2,126	2,059	1,966	1,838	1,763	1,718
567	513	593	456	470	444	431	390
1,430	1,461	1,455	1,472	1,448	1,479	1,468	1,474
117	111	125	107	105	117	108	111
3,866	3,906	3,861	3,883	3,843	3,719	3,675	3,653
247	246	239	252	263	261	261	245
427	424	415	425	422	418	406	387
524	515	507	549	556	529	522	481
6,610	6,545	6,574	6,615	6,656	6,532	6,403	6,416
42	44	45	46	46	43	46	44
1,262	1,272	1,210	1,314	1,300	1,356	1,283	1,314

A rough check of the figures for 1929-30 may be obtained by comparing therewith the value of buildings for which permits were granted by municipal authorities in the Greater Melbourne area during the same period. Particulars in regard to such permits are as follows :—

BUILDING PERMITS GRANTED, 1929-30.

	Number.	Value.
		£
Dwellings	2,875	2,828,000
Other buildings	2,980	1,264,555
Alterations and additions	3,092	904,959
Total		4,997,514

The two sets of figures are not, of course, strictly comparable since in one case they relate to all building work done within the State, and in the other case to the permits to build granted within the metropolitan area.

The number of persons employed and the total salaries and wages paid are shown hereunder.

Persons Employed.				Number.	Salaries and Wages Paid.	Average Salary or Wage.
					£	£ s. d.
Working proprietors	..	..		1,075	258,878	240 16 4
Managers	..	..	..	134	47,880	357 6 3
Clerks—						
Male	..	..	..	72	13,789	191 10 3
Female	..	..	..	41	4,681	114 3 5
Others	..	..	..	5,476	1,112,280	203 2 5

The average wage paid to "Others," in which term is included all workers directly employed by the builders, is low, probably because work had been intermittent on account of a depression which prevailed in the building industry during the period. The following statement shows the payments to sub-contractors:—

PAYMENTS TO SUB-CONTRACTORS.

				£					£
Plumbers	..	..	..	230,325	Bricklayers	..	..	..	116,155
Painters	..	..	..	138,971	Tilers	..	..	..	92,281
Electricians	..	..	..	92,561	Others	..	..	..	555,788
Joiners	..	..	..	123,806					
					Total	..	..	..	1,349,887

The term "Others" in this statement includes contractors for excavations, concreting, asphaltting, fibro-cement and plaster work, plastering, &c., and where certain builders have been unable to dissect their costs the total has been included under this heading. The term "sub-contractor" is intended to mean sub-contractor for "labour and material" only. Persons compiling returns were instructed to include contractors for "labour only" under the heading of "persons employed," and the amount of the contract under "wages paid."

The value of materials used has been, in most cases, carefully dissected, but some builders have been unable to give the details asked for. This is regrettable, as it is important that

Materials
used.

complete statistics in regard to materials used should be available. Where the details could not be supplied it was necessary to include the total cost of all materials used under the heading of "Other materials." The value of the materials used is shown below :—

Materials.					Value.
					£
Timber	..	..	..	..	1,108,896
Bricks	..	..	..	..	330,423
Tiles	..	..	..	..	81,483
Cement and lime	..	..	..	..	186,623
Other materials	..	..	..	..	1,482,196
Total	..	..	..	..	3,189,621

In addition to payment for wages, materials, and sub-contracts, there are numerous other expenses incidental to building, such as fuel, insurance, building fees of various kinds, &c. These have been included under the heading of "Other expenses," and total £81,817.

Capital invested in plant and machinery amounted to £136,139, and in land and buildings used as workshops to £106,246.

The following table is an analysis of the buildings completed during the year. As some of these buildings were doubtless commenced in the previous year, the total value is not a measure of the value of building construction for the year 1929-30. The table published at the beginning of this review purporting to show value of work done is designed for this purpose.

BUILDINGS COMPLETED DURING 1929-30.

					Number.	Value.
						£
Business premises	..	..	..	..	361	1,473,018
Other buildings	..	..	..	..	..	835,360
Dwellings—						
Brick	..	..	..	..	927	1,215,338
Wood	..	..	..	..	1,727	1,252,667
Total Value	..	..	..	..	..	4,776,383

Information collected with regard to dwellings was confined to those constructed of brick and of wood as representative of the most common types of houses built in Victoria.

The table hereunder summarizes the result.

DWELLINGS CONSTRUCTED, 1929-30.

Number of Rooms.	Brick Dwellings.		Average Value per Dwelling.	Wooden Dwellings.		Average Value per Dwelling.
	Number.	Value.		Number.	Value.	
		£	£		£	£
Three rooms . . .	14	7,194	514	66	22,759	345
Four rooms . . .	58	49,752	858	416	258,295	621
Five rooms . . .	524	526,462	1,005	1,097	828,360	755
Six rooms . . .	209	292,107	1,398	120	107,901	899
Seven rooms . . .	43	81,304	1,891	17	17,256	1,015
Eight rooms . . .	32	69,221	2,163	7	9,374	1,339
Nine rooms . . .	14	35,408	2,529	2	3,114	1,557
Ten rooms . . .	7	22,318	3,188	..	..	..
Over ten rooms . .	26	131,572	5,060	2	5,608	2,804
	927	1,215,338	1,311	1,727	1,252,667	725